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FUNCTION AND CURRICULA OF HIGH SCHOOLS

by

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A Thesis Submitted for the Degree of

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Introduction.

At no time in the history of the world has secondary education attracted as much attention as is accorded it to-day in the United States. Discussions of this phase of the educational system appear in bewildering profusion in books, magazines, newspapers, and pamphlets. This attention is not surprising. The phenominal development of the public high schools is an event whose importance and far reaching consequences cannot be overestimated. Less than twenty years ago waves of anti-high school sentiment would occasionally sweep from the Pacific to the Atlantic. To-day the high school is firmly intrenched in the hearts of the American people. It has become a fixed and indispensable portion of our great public school system, receiving liberal and cheerful support everywhere.

Of the many live problems in connection with these schools, none attracts wider attention now, than their function, as indicated by their curricula. These are now replete with numerous subjects not found in former secondary curricula two or three decades ago. The old scholastic program has given way to an influx of studies of more modern growth. Classics are not the sole pabulum in our secondary schools. Modern foreign languages-a necessity now to science and industry, the many scientific subjects developed recently, manual training,

domestic economy, art instruction, etc., claim a large portion of the time. Formerly one meager course of study was offered, now the introduction under wise supervision of the elective system into the high schools is preparing the way for opening to the college and university students fields of knowledge which have been before closed except to the special investigator.

There is a wide difference of opinion as to the advisability of such a course. Many claim that the elective system has no place in secondary schools. That it results in one-sided development-a disadvantage far greater than the benefits accruing from early special investigation. On the other hand, there are many educators who maintain that the elective system ought to be introduced still more extensively. They hold that the progress of humanity depends on fostering the talent that members of the race possess. This difference of opinion leads naturally to a difference in the conception of the function of secondary schools and of the curricula requisite for its realization.

A discussion of the function and curricula of the modern high school would be incomplete unless introduced by a brief historic survey of its predecessors. Europe derived many of its educational traditions from the Orient, and courses of study for secondary schools were in process of evolution across the

Atlantic Main long before the United States became "The land of the free and the home of the brave". Our secondary schools first followed the European traditions, but they in turn have cut loose from the East. "Westward the Course of Empire takes its sway," is true of education too.

Since secondary education depends upon instruction received in primary schools and in turn prepares for higher education, it becomes necessary to take cognizance of both these fields, especially in the historic survey of ancient and medieval education where it is difficult to tell where one ends and the other begins.

We shall see that the development was not a continuous one. It does not resemble a perfect inclined plane like the one at Callao, Peru, nor the spiral road leading to the summit of Pike's Peak. It rather resembles one of our magnificent transcontinental railroads climbing the Rocky Mountains, now with a sharp upward gradient, now descending into a valley where its altitude is but little in excess of its former place, then a slow incline, etc. We have not yet reached the summit. Will it ever be reached?

Chapter 1.

Types of Ancient Educational Ideals.

Value of studying Educational Ideals of other Great Nations.

In order to solve some of the great problems in secondary education now confronting America it becomes necessary to use the lamp of experience accorded us by a study of the educational aims and ideals of great nations, past, as well as contemporaneous and how they endeavored to attain them. Though it is conceded that it is questionable whether there is anything peculiar in the aims and practices of these nations which is directly applicable to American conditions; that each nation, like an individual has its own instinct, genius, and missions; that it must educate itself in its own way and for its own ends in conformity with the educational ideal of its civilization, yet such study is valuable. Its value lies not in the adoption of aims and ideals of Persia, Egypt, Greece, Rome, Germany or England, nor in the imitation of agencies employed there to realize them. It lies in deducing from their successes and failures valuable lessons for our guidance; in properly comprehending the educational factors which have contributed toward the progress of humanity; in selecting from these those permanent essentials upon which the

civilization of the race and the realization of our national ideals depend, and in taking lessons of the foreign way of adapting means to ends in the realization of great ideals.

Persian Ideals.

Among the nations of the Orient, Persia held a conspicuous place. From the standpoint of modern civilization it surpassed both China and India in the height of its educational ideal and practice. Archdeacon Farrar in speaking of ancient Persian education writes as follows: "We boast of our educational ideal. Is it nearly as high in some essentials as that even of some ancient and heathen nations long centuries before Christ came? The ancient Persians were worshippers of fire and of the sun; most of their children would have been probably unable to pass the most elementary examination in physiology, but assuredly the Persian ideal might be worthy of our study. At the age of fourteen--the age when we turn our children adrift from school, and do nothing more for them--the Persians gave their young nobles the four best masters whom they could find, to teach their boys wisdom, justice, temperance, and courage--wisdom including the duty of unswerving truthfulness through life, temperance including mastery over sensual temptations, courage including a free mind opposed to all things coupled with guilt."

How attained.

Her ideal was essentially the militant-civic, demanding physical strength and moral purity. The means employed to reach this ideal were simple and effective and some suggest themselves as improvements over methods in vogue. The boy, at the age of seven, was taken from the care of the mother and placed under that of the state. His education, until his fifteenth year was physical and moral. The body was steeled and strengthened by gymnastics, exposure to inclement weather, and by temperate habits in partaking of food and drink. He was carefully guarded against contact with vice. Abhorrence of ingratitude and lying-considered the most shameful vices was duly inculcated. At the same time, by precept, example, and practice, the virtues of self-control, truthfulness, and justice were firmly implanted. He was taught to know that the kingdom of light and of the good will prevail and that it is the duty of every man to contribute to its success. At the age of fifteen, while his military discipline increased in severity, instructions from overseers and governors fitted him for taking position in the civil service, should occasion demand.

How Moral Character Developed.

Their method of inculcating ideas of justice was unique. According to Xenophon, the boys went to school to have their sense of justice awakened and developed. Therefore the masters spent the day especially in holding court among the boys, who, after

the manner of men, brought indictments against each other for theft, violence, cheating, offensive language, etc.; not only the convicted prisoners, but also the false accusers being punished. Ingratitude was punished with special severity; for the Persians held that the ungrateful can love neither the gods, their parents, their fatherland, nor their friends, since with ingratitude shamelessness is always united, and that the latter is the most prolific source of all vices.

Limitation of Ideal. Suggestions for us.

Their ideal, while excellent in producing physical and moral perfection, almost wholly ignored intellectual training and aesthetic culture. Only the Magi received instructions in reading, writing, astronomy, philosophy, and medicine, and but the bare rudiments of those subjects. What a bold contrast with the ideals of our own times! Yet other nations have learned, and still may learn of them the value of contributing to physical perfection by means of systematic exercises and also a very effective aid in character training through the selection of teachers possessing strong personality, thorough knowledge of what they are to teach, and skill in presentation of subject matter.

Egyptian Ideals.

The ideals and aims of ancient caste-hampered Egypt were mainly utilitarian. In the lower castes, the fathers or guardian taught the boy the occupation into which he was born. The boys of the commercial caste received some instruction in the rudiments of reading, writing, and arithmetic. The courses of study for the youth of the warrior and the priestly castes consisted of the elementary subjects as taught the commercial caste, and of superior instruction, embodying language, mathematics, including surveying, astronomy, natural science, and religion. The highest phases of instruction in these branches were open only to those designed for the priest-hood. The entire education was in the hands of the priests who everywhere inculcated due reverence for religion and its officials, and for usages handed down for ages. Gymnastics and music were little practiced.

Educational lesson. Although of the ancient oriental nations Egypt attained the highest point in the intellectual culture of a portion of her people, yet her educational lesson to us is mainly negative, showing the narrowing influence of strictly utilitarian instruction, and the danger in conservation akin to their reverence for usage handed down for ages.

Greek Ideals.

Spartan Ideal. The Spartan ideal was pre-eminently militant. Their methods of realizing them were similar to, but far more rigorous than those employed by the Persians for this end. The sternest simplicity prevailed everywhere. Their food and clothing were scant. They were thoroughly trained in gymnastics, especially running, jumping, wrestling and playing with spears. The meager instruction in reading and writing was admirably supplemented by their constant association with the old from whom they absorbed the art of conversing in an easy and agreeable manner, dignified bearing, intense love of country, admiration of courage, and much practical knowledge of state and other affairs.

Athens' Ideal.

In bold contrast with the simple military ideal of Sparta stands the aesthetic ideal of Athens,-a beautiful soul in a beautiful body. There the youth of the poor received some intellectual education while the training of the youth of the aristocracy extended through eighteen years.

Intellectual training. During the first period reading and writing were taught. This was followed during the second period by instruction in arithmetic, grammar, and literature. At the age of twelve he was introduced to the

beauties of poetry, rhetoric, music, mathematics, and philosophy. Music with them was not a source of amusement, but was studied on account of its ennobling tendencies upon the soul.

Physical and moral training.

Their physical development received careful attention in the gymnasium where they were taught swimming, running, jumping, wrestling, spear and discus throwing, not for the purpose of developing strength and endurance as in Sparta and Persia, but for securing symmetrical development of the body. Courage, patriotism, modesty and politeness were enjoined and practiced at all times.

Educational lessons.

Socrates, Plato, Aristotle and other great teachers have contributed much to education, but a discussion of this phase would be foreign to the purpose of this paper. Suffice it to say that the lesson of Ancient Greece to America point out that we have sadly neglected in our secondary education the feeling for the beautiful, the picturesque, the sublime--feeling capable of contributing so much to human happiness, that we have neglected the arts of music and oratory, nor do fully comprehend the educational value of the play. It is sad, yet true, that we have not yet succeeded in combining systematic physical training and play, as did the Greeks of yore in their national games.

Roman Ideals.

Ideals. Rome under the Republic down to the conquest of Greece imitated the Spartan ideal. Under the Emperors, Athenian ideals were preferred. However, in consequence of the utilitarian inclination of the Romans, literature and oratory received marked attention. Music and sculpture were left mainly to the Greeks. While the Greek education aimed at intellectual and physical culture, the Roman had utilitarian ideals, essentially literary and ethical. Athens' ideal of intellectual culture is represented in our classical courses; Rome's utilitarian, combined with the literary and ethical in our scientific courses. Since the Romans merely imitated the Greeks in education, they have no lesson for us in this field save that of showing how to adapt ideals and methods to secure desirable results under conditions different from those which formerly produced them.

Educational Lessons.

Chapter 11.

Medieval and Modern Continental Ideals.

German Ideals.

Rank. Of the modern nations, Germany's educational ideals and practice rank foremost. A study of her schools is also in large measure a study of all similar schools on the continent because the other nations have patterned after her. Even France and England did. France in 1830 and again after her national disaster of 1870. England, in 1856, sent ~~Dr.~~ Mr. Arnold to study German schools for the purpose of making that study the basis of plans for improving English schools. The German Former. schools were organized to support the tenets of the Christian faith and they have always been strong agencies in the realization of the highest spiritual ideals of the German people. Now, after the union of church and state, they have been taken over bodily into the service of the broader national life. Their aim now is to produce a religious and patriot- Present. ic citizen-ship.

Emperor William's effort. The elementary school has fully realized its ideal but not the secondary schools. Hence Emperor William called that famous conference of secondary school teachers in December 1890 to discuss ways and means with them. Talking of the existing practice he said: "First of all,

a national basis is wanting. The foundation of our gymnasium must be German. It is our duty to educate men to become young Germans, and not young Greeks or Romans. We must relinquish the basis which has been the rule for centuries-the old monastic education of the Middle Ages, when Latin and a little Greek were most important. These are no longer our standard; we must make German the basis and German composition must be made the center around which everything else revolves." Again in his order of May 1, 1899 he says: "The prime object of the schools will be ever to lay the foundation for a sound comprehension of both civic and social relations, by cherishing reverence for God and love for the fatherland. But I cannot fail to recognize that in a time when the errors and misrepresentation of social democracy are spread abroad with increased zeal, the school is called upon to make increased efforts to advance the recognition of the true, the real, and the possible in the world. The school must endeavor to create in the young the conviction that the teachings of social democracy contradict not only the divine commands and Christian morals, but are, moreover, impracticable and in their consequence destructive alike to the community. The school must be for the purpose of bringing the new, and the newest history of the times more than hitherto into the circle of the subjects of instruction, and show that the power

Emphasizes purpose of gymnasia.

of the state alone can protect for the individual his family, his freedom, and his rights. And it must bring the youth to know how Prussia's kings have exerted themselves to elevate the condition of the laborers, in a continuous development from the legal reforms of Frederick the Great and from the abolition of serfdom to the present day. Moreover, the school must show, by statistics how considerably and constantly in this century the wages and condition of the laboring classes have improved under this monarchial protection."

Edmcational Ideals of the Middle Ages.

In the foregoing paragraph a brief summary was given of the change in the educational ideals in Germany, their present status and also the efforts now made to reach the goal set by recent ideals. I will now proceed to discuss more in detail the educational phases of this country that bear upon our topic. At the beginning of the seventh century Germany was still enthralled in heathendom. With the advent of the messengers of the Gospel came the school. The church recognized early the necessity of supporting the tenets of the Christian faith by educating those designed for the priesthood. In conformity with this ideal, schools were at once founded at Reichenau and St. Gall. These have become famous as models after which all schools of northern Europe during that period were patterned. At the beginning of the eighth century the Gospel was spread far and wide, not only by the missionaries from the South, but

also by members of the Benedictins from the North. Native missionaries were in great demand, hence monasteries and schools grew up side by side and became centers of educational influence as well as training schools for missionaries. The school at Fulda especially attained great renown and even now ranks high among the schools of Germany.

Limitations. Since the preparation of the pupils for the priesthood was the function of these schools, all instruction proceeded naturally from the clergy. Their course of study was planned for the purpose of promoting the work of the church. Though theoretically composed of grammar, rhetoric, logic, arithmetic, geometry, astronomy and music, the church language and singing always stood first in the curricula and later on usurped nearly all the time that should have been devoted to the study of the other branches.

Alcuin's Influence. In the course of years these schools greatly deteriorated. Their function had become too narrow for the times. Charlemagne, viewing with regret this state of affairs set about to secure some reforms. He required the clergy to teach reading, arithmetic and singing as well as religion. Invitations were sent to all renowned scholars of Europe to come to his court. Some accepted the call. Of those Alcuin, England's distinguished scholar , became a power for good in the educational interests of Germany. Under his influence, schools again multiplied. Their sphere was enlarged.

The function of the schools ceased to be wholly ecclesiastical, becoming something more than that of preparation for the priesthood. The national self consciousness now so prominent in Germany sprang into existence then.

Beginning of National Self Consciousness.

Charlemagne, Alcuin and many others desired earnestly to form a great empire in strict harmony with the church. It was clear to Alcuin that for the realization of this aim the common people would have to be rescued from barbarism and taught by a Christian education to thoroughly appreciate the value of the Christian citizen-ship. Alcuin's plans received the hearty approbation of Emperor Charles the Great, as the following extracts from his famous proclamation will show: "As it is our desire to improve the conditions of the Church, we make it our task to restore with watchful zeal, the study of letters, a task almost forgotten through the neglect of our ancestors. We would therefore enjoin to our subjects, so far as they may be able to study the liberal arts." At another time: "Let there therefore be chosen for this work men who are able and willing to learn, and also desirous of instructing others, and let them apply themselves to the work with a zeal equalling the earnestness with which we recommend it to them."

Effect.

Under the influence of this pressure and of this conception of the function of schools the monastic schools were rapidly reformed and enthused with new life —

and activity. Their number increased. But by far the most important step in the direction of improvement, was the admission of laymen to these schools. There was much prejudice among the clergy against this, but the doors opened to out-siders never so cautiously at first, soon swung open a little farther and never afterwards closed entirely upon them.

Fluctuations. A fine start was made in the direction of improvements but both impulse and result largely vanished under the weak successors of Charles the Great. The schools again deteriorated, to be revived in turn by Scholasticism, the Renascence and later on by the Reformation.

Curricula in the Schools of the Middle Ages. The curricula in these schools varied a trifle with the fluctuation of the ideal. In its essentials [illegible]ch consisted of the mastery of the Latin tongue, committing the psalter to memory, reading, writing, a little arithmetic, and church music.

The methods were in accordance with the ideals of the times. Just enough arithmetic was taught for computation of the church calender; music for carrying on the religious ceremonies. Latin was the main staple. To make the pupils experts in the tongue demanded its enforced use at all times. This in connection with the memorizing of portions of the Holy Writ made them ready linguists. To give additional practice, Roman authors, especially the poets were carefully studied--not for what they said so much, as for their way of saying it. This

phase of study was denominated rhetoric.

Influence of Feudalism.

The ideals of Feudalism remind us of those of ancient Persia coupled with the physical ideal of Athens. They consisted of success in chase, tournament and battle, of writing verses, singing ballads, and making love to ladies. For this purpose the youth were taught riding, swimming, archery, fencing, hunting, chess playing, music, and rhyming. While these themselves were not antagonistic to the schools of the times, they tended to produce the impression that study of books was effeminate and in this way Feudalism seriously interfered with the development of the intellectual ideal.

Influence of Scholasticism.

The aim of scholasticism "to render the dogma acceptable to reason" of necessity brought about an alliance between the theology of the medieval church and philosophy, developed strong deductive reasoning powers, and revived interest in scientific studies.

Influence of the Rise of Cities.

In cities, industrial and commercial considerations demanded that more attention be given the vernacular and comman branches. In consequence of this, schools in these places drifted away from Latin which did not there regain its pre-eminence until the Renascence.

Influence of the Renascence.

The revival of learning produced the humanistic ideal. Its adherents found more pleasure in authors who portrayed incidents

in human life or history in rich variety and in beautiful form, than in scientific pondering and disputations. The humanistic ideal completely shattered within twenty years the ideal of scholasticism reaching its highest point during the sixteenth century. Greek supplimented Latin. Its aims and workings are shown in its extreme form in the celebrated Sturm Gymnasium of Strassburg whose avowed purpose was to produce scholars noted for piety, knowledge, and eloquence. Instruction was almost entirely linguistic. Latin was exclusively taught, read, spoken, and written four years every day during ten years. During the last six years of the ten years' course Greek was thoroughly taught in addition the work in Latin tongue. Mathematics and other branches received but little attention.

Forces Which Produced Change in Ideals.

So far the school has been looked upon as a servant of the church-a position she had well and honorably filled for a long period. At present the school has become the handmaid of the state. What forces produced this far reaching metamorphosis? They were those that brought on the Renascence-that mighty chain of progress of which the Reformation was but a link. These forces did not cease with the Renascence. Having made learning popular, they became cumulative by developing an intense desire for culture and general enlightenment. When studying the transition

we discern among others the influence of the work of Dante, Petrarch and Bocaccio; of Copernicus, Kepler and Galileo; of Guttenberg, Torricelli, Pascal and Newton; of Columbus, Magellan and De Gamo; of Bruno, Bacon and Descartes; of Reuchlin, Agricola and Erasmus; of the Crusades, Reformation, Jesuits, Jansenists and Pietists. The Great Educational Reformers were also potent factors in this change of ideals. It is beyond the scope of this paper to trace the influence of each of these factors. I must confess that the temptation is strong to give space to this very interesting phase in the History of Education, but it would make this piece of work too bulky. Hence I will content myself with a few sketches of the most important factors.

One of the consequences of the Renascence was renewed interest in scientific investigations, the results of which, thanks to the invention of paper and the printing press soon became known far and wide. Some of these investigations led to results not in harmony with accepted theories. The Church attempted to maintain the old, but "truth crushed to earth" rose triumphantly. The new theories were confirmed by the work of the explorers and the prestige of the church, already much weakened by exceedingly poor work in school, corrupt practices, and objectionable dogmas declined still more rapidly. More abuses followed and then came the Reformation. The effect of the latter movement was at one time checked by a body of men

known as the Jesuits. They started a counter-reformation and endeavored to bring back the wanderers to the fold of Rome by means of preaching, confession, and education. They substituted for the old monastic regime of incessant punishment-mainly corporal, an elaborate system of rewards. Kindness, thoroughness in the few things taught, repetition, and emulation were their key words. Secondary education was their field. The course consisted of six years. Boys began at fourteen. The first year the rudiments of Latin were studied; Latin grammar, the second; Latin syntax, the third; philology and verses, the fourth; rhetoric, the fifth and sixth. Greek was subordinate, and arithmetic, geography, and history received but scant attention. This course does not differ materially from that in use in many secondary schools of that period. It is in the realm of methods that education is indebted to the Jesuits. They attended carefully to the health and physical comforts of their students, formed right personal relations with them, and made learning pleasurable. They erred in confining their education to boys, in the excessive use of emulation, in their system of spionage, and in repressing originality and independence of mind, love of truth for its own sake, and the power of reflecting and forming correct judgment.

The Jesuits were opposed by another body of Catholics-the Jansenists or Port Royalists who tried to check the progress of the Jesuits for the purpose of reviving pure Catholicism.

Like the Jesuits they treated the Humanities as at once the root and the flower of education. But while style and form were the main considerations of the Jesuits, the Jansenists put things before words. They argued that the utility of things should be joined with that of words in order to form the judgment of the young while their memory is stored. They wrote their grammar in French thus emphasizing the teaching of the mother tongue and paid due attention to mathematics and science. In this as well as in their aim-to develope well the faculties, judgment and reason included, they tower far above their opponents.

As the result of the numerous inventions and discoveries, new industries arose and commercial activity was greatly enhanced. This produced a great change in the civilization of the age. The Great Educational Reformers and the Pietists endeavored to change the subject matter and methods of instruction so as to fit the child for the civilization into which he is born. They were largely instrumental in bringing about the conception that education is a development of the whole man, that educational methods must follow the order of nature, and that all instruction should make for character. They succeeded nobly in this but in the adjustments of the claims of Humanism and Utilitarianism no concensus of opinion was reached. It is doubtful whether educators ever will agree on this point, since in our rapidly advancing age, the ideal of to-day is not

the ideal of to-morrow.

The terrors of the Thirty Years' War, the success of Frederick the Great, the oppression suffered under Napoleon, and his final overthrow were also powerful factors in Germany in still farther removing the school from the authority of the Church and making it an instrument for developing patriotic citizenship.

Influence of the Reformation.

The Revival of Learning brought on the Reformation and it in turn brought with it the real origin of the German elementary school system. Luther formulated its course of study. The German languago including reading and writing and religion, formed its backbone. It also provided for elementary instruction in arithmetic, geography, history, and music. This is essentially the course in the German elementary schools to-day, drawing and elementary science having been added to it since. Its purpose was to lay broad and deep intelligent foundation for patriotic citizen-ship bas- upon the Christian Religion. The methods used for securing this have undergone more changes than did the curriculum.

Luther's Course of Study.

Purpose.

While Prussia was lying helpless at the feet of Napoleon, Humbold, Prussia's greatest Minister of Education, secured the introduction of Pestalozzian methods. Music, one of Pestalozzi's instruments of culture was made the vehicle of patriotic songs. All this

Introduction of Pestalozzian Methods.

aided in producing a national self-consciousness and finally in 1872 Alcuin's dream was realized at Versailles.

Founding of Modern Gymnasium. It was also during the period of Prussia's greatest humiliation, that the modern gymnasium was founded by Wolf, one of the followers of Humbold. Prior to this period the gymnasia had strictly humanistic ideals and gave most of their energy and time to a study of classics. Now the spirit and ideals of the times demanded a place for realistic studies in the curriculum. Wolf's gymnasium therefore started out with a compromise program arranged as follows: Latin, 8 hours a week, Greek, 7, German, 4, mathematics, 6, history and geography3, religion 2, science, 2. In recent years the amount of time given to Greek has been reduced and more is given to science. French has also been introduced.

Founding of Real School. In consequence of the recent growth of industries and of colonial expansion, a heavy demand for courses strong in modern languages, mathematics, and natural science has arisen. To satisfy this demand the Real Schule and Real Gymnasium were organized. These have become strong opponents of the gymnasia and at present the fight between the adherents of the two ideals is very bitter. In one of the foregoing paragraphs I referred to the controversy. The gymnasia are charged with representing ideals not in accordance with those of the age. I concede that they can be made more effective for Germany's ideal if the Emperor's plan is follow

but would sincerely regret to see them abandon their higher plane for the strictly utilitarian one.

It is not necessary for our purpose to examine into the educational aims of secondary education in other countries, since their systems are patterned to a considerable extent after the German as has been shown on another page. While France professes to be par excellence, the land of the humanities on account of her classical literature and art, yet the struggle between the utilitarianism and humanism is as sharp there as anywhere. England's Grammar and Great Public Schools still retain in a large measure the humanities of the Reformation. These schools in their games however approach closer in spirit and value to the national Greek games than any schools of any other nation.

In this discussion Gewerbe and Polytechnic schools have been omitted since their aim differs widely from that of other school systems.

When giving my view of the educational ideal, and function of the American High Schools, a summary will be made of what has been contributed to our educational ideals by each of the nations discussed.

Chapter 111.

United States.

Colonial Secondary Schools.

Source. The secondary schools of our nation were reproductions of European schools of that period. The earliest American settlers brought with them as their educational dower from their respective fatherland definite ideals of schooling. It was very natural that the colonists endeavored to reproduce home conditions. The New England Grammar Schools patterned after English Grammar Schools in form and course of study. The Academies were reproductions of the great public schools of Rugby, Eton, Westminster, etc. The Dutch in New York reproduced the characteristics of schools in Holland; and the Swedes in Delaware, those of Sweden. In view of this, it is surprising to note the similarity in form and curricula. This is explained by the fact that these nations received their ideas of secondary education from Germany and simply modified them to fit home conditions which did not materially change them. Hence it is not of much practical value to discuss whether our system is derived from the English or from the Dutch.

New England. The Massachusetts Grammar Schools were the "Pioneers" of secondary education in the New England States. Hence they served as models for the neighbor-

ing colonies. It will, therefore, suffice if the development of these schools is given for the typical New England Colony.

Early Schools.

The Puritans, fleeing from civil and religious oppression, conscious that they were laying the foundation of a mighty nation and knowing from the training in England's Grammar Schools and Universities, the value of education, determined to lay the foundation broad and well upon religion and liberal education as understood at that time. In accordance with these ideals Harvard College was founded in 1638. The first session was held in 1638, and the first American College Graduate left its walls in 1642. For the times, Harvard's standard of scholarship ranked high as the following extract from its admission requirements shows: "When any scholar is able to understand Tully, or such like classical author extempore, and can make and speak true Latin in verse and prose;----and decline perfectly the paradigms of nouns and verbs in the Greek tongue, let him then, and not before, be capable of admission into college."

In 1647, the General Court passed this order:

Grammar School.

"It being one chief project of that old deluder, Satan to keep me from the knowledge of ye Scripture, as in former times by keeping them in an unknown tongue so in these latter times by persuading from ye use of tongues, that so at least ye true sense and meaning of ye original might be derided by false gloss of saint seeming de-

ceivers, that learning may not be buried in ye graves of our fathers in ye church an commonwealth, the Lord assisting our endeavors. It is therefore ordered that every township in this jurisdiction, after ye Lord hath increased them to ye number of fifty householders, shall then forthwith appoint one within their towne to teach all such children as shall be paid either by ye parents or masters of such children or by ye inhabitants in general, by way of supply, as ye magistrate or part of those that order ye prudentials of ye towne shall appoint: provided the people send their children, they shall not be oppressed by paying much more than they can have them taught for in other towns; and it is further ordered that where any towne shall increase to ye number of one hundred families or householders, they shall set up a Grammar Schoole, ye master whereof being able to instruct youth as far as they must be fitted for university, provided that if any town neglect ye performance hereof above one yeare, that every such towne shall pay five pounds to ye next schools till they shall perform this order."*

Function of Secondary Schools in New England.

The foregoing shows clearly that education in New England of this period, though there was a manifestation of a strong tendency toward learning for its own sake, was still dominated by the religious ideal brought from European schools where Latin was

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* (Mass. Colonial Records. 1647. Vol. 11, P. 203)

studied that students might read Church Fathers, rhetoric, that they might participate in the religious discussions then in vogue; and music for the purpose of assisting in the ceremonies of the Church. The following law passed in 1654 by the General Court leaves no doubt as to that: "For as much as it greatly concerns the welfare of this country that the youth thereof be educated, not only in good literature, but sound doctrine, this court doth therefore command it to the serious consideration and special care of the overseers of the college and the selectmen of the several towns, not to admit or suffer any such to be continued in the office or place of teaching, educating, or instructing of youth or child in the college schools, that have manifested themselves unsound in fayth, or scandulous in their lives, and not giving due satisfaction according to the rules of Christ." *

The law of 1641 remained in force until 1807. The other New England states enacted similar laws. Connecticut in 1676 ordered that "Every towne should mayntaine a Latin Schoole" and every town that failed to do so was to pay a fine to the next adjoining town. These schools were to be maintained "by way of rate except upon condition that any town shall agree upon some other way to rayse the mayntenance." * *

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* (Mass. Colonial Records, 1647. Vol. 11.)

* * (Laws of Connecticut. Vol. 11.)

Growth.

Through the influence of Governor Winthrop, John Cotton and others Grammar Schools had been established in Boston, Salem, Dorchester and several other places before 1647. After the passage of this law their number increased steadily until the Revolutionary War. Then their places were in part filled by the academies.

Southern Colonies.

Reasons for slow Development of Schools.

Virginia is the type of this section. Her conditions were not favorable to a rapid development of an educational system. The first colonists were mostly adventurers desiring to make their fortune and then return to England. The colonists who followed were descendants of aristocratic families and settled on large plantations far apart. The spread of negro slavery helped to increase the dislike for popular education. The wealthy plantation owners saw no necessity for the establishment of schools. They had private tutors for their children and the advanced were sent to the mother country for higher education. This course did not dispel the prejudice against popular education. In the course of time the need of a home college became apparent and the Legislative Assembly in 1660 voted: "That for the advance of learning, education of the youth, supply of ministry, and promotion of piety, there be

Founding of William and Mary's College.

land taken upon purchase for a college and free schools, and that there be, with as much speed as may be convenient, housing erected thereon for the entertainment of students and scholars."

Function of this College.

The ideals and purposes of college education are well pointed out in this paragraph from its character. It was founded "To the end that the Church of Virginia may be furnished with a seminary of ministers of the gospel, and that the youth may be piously educated in good manners, and that the Christian faith may be propogated among the Western Indians to the glory of Almighty God." * That the free schools referred to mean preparatory schools for the college and were not intended for popular education is proved by Sir Berkley's famous letter/1671 where he says "I thank God there are no free schools nor printing and I hope we shall not have these for a hundred years; for learning has brought disobedience, and heresy and sects into the world, and printing has divulged them and libels against the best government. God keep us from both."

In 1692 higher education received an impetus through the founding of the College of William and Mary mentioned in the act of 1660. A few Grammar Schools were founded to prepare for the college, but Sir Berkley's hope in regard to free schools was fulfilled. Virginia waited for her school system until 1801.

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* (College of William and Mary, Bureau of Education.)

Early Schools.

Before William Penn took possessions of his American domain, the Dutch and Swedes had established therein a few secondary institutions with curricula and purposes in accordance with the ideals of the time. These soon coalesced with English schools of the same type or were abandoned altogether.

Combination of Scholastic and Apprentice Traditions in Early Quaker Schools.

The Quakers brought with them from their fatherland its two educational traditions, the scholastic and the apprentice tradition of the workshop. Both were of ancient origin and both experienced a revival in the sixteenth century. The former, by the Renascence, the latter, by statutary provisions. In England these two traditions flowed side by side without intermingling. The Grammar Schools encouraged the study of languages, especially Latin and Greek; the apprenticeship system, the acquisition of manual skill and knowledge of craft. In the ancient or early Quaker schools, Penn and his followers endeavored to unite in their courses the scholastic ideal of the one with the utilitarian one of the other--a thing now accomplished in the polytechnic schools. In 1682 the General Assembly passed the following law: "That the laws of this Province from time to time, shall be published and printed, that every person may have the knowledge thereof; and they shall be one of the books taught in this Province and

Territories thereof." *

Utilitarian Ideal. Here is a strong indication that even the scholastic instruction is to serve for utilitarian purposes. It can be readily discerned that such a course may give rise to excellent instruction in civics and thus promote good citizenship.

Founding of Grammar Schools. Under Penn's guidance a Grammar School was organized in Philadelphia in 1689. This school has always enjoyed a high reputation and is still in existence--a monument to its founder's memory.

Its Purpose. The purpose of the school was clearly stated by Penn in the preamble of its charter. "Whereas, the prosperity and welfare of any people depend, in a great measure upon the good education of youth, and their early introduction in the principles of true religion and virtue, and qualify them to serve their country and themselves by inculcating love of reading, writing, languages, and of useful arts and sciences, suitable to their sex, age, and degree--which cannot be effected in any manner so well as by erecting Public Schools for the purpose aforesaid."

Again: "To establish in Philadelphia a public school where all children and servants, male and female shall be educated, the rich at reasonable rates and the poor to be maintained at school for nothing---Poor children are to be freely

* (Wickersham's History of Education in Penn.)

maintained, taught, and educated in good literature until fit to be put out as apprentices, or capable to be masters or ushers in said school."

Course of Study.

Regarding its course of study little is known but the foregoing extracts from the charter and assembly laws are simplyan evidence of the desire to blend the two traditions mentioned. This is farther borne out by one of Penn's speeches in which he states when speaking of the work of the school that the pupils would rather be making tools and instruments, drawing, building, etc., than getting some rules of propriety of speech by heart and then continues, "All children within the Province of the age of twelve shall be taught a useful trade or skill to the end that none may be idle, but the poor may work to live, and the rich, if they become poor, may not want." *

Budd's Recommendations.

Furthermore, a good idea of the courses of study and ideals of schools may be obtained from Thos. Budd, a Friend, and one of colonial New Jersey's most prominent men, who recommended; "That schools be provided in all towns and cities, and persons of known honesty and skill be yearly chosen by the Governor and General Assembly, to teach and instruct boys and girls in all the most useful arts and sciences, that they in their youthful capacity may be

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* (Wickersham's History of Education in Penn.)

able to understand, as the learning to read and write true English and Latin, and other useful speeches and languages and fair writing, arithmetic, and book-keeping; and the boys be taught and instructed in some mystery or trade as the making of mathematical instruments, joinery, twinery, the making of clocks and watches, weaving, shoe-making, or any other useful trade or mystery that the school is capable of teaching; and that the girls be taught and instructed in the spinning of flax and wool, the knitting of gloves and stockings, sewing and making of all sorts of useful needle work, and the making of straw-work, as hats, baskets, etc., or any other useful art or mystery that the school is capable of teaching.-----The scholars may be kept in the morning two hours at reading, writing, book-keeping, etc., and the other two hours at work in that art, mystery, or trade, that he or she most delighteth in: in the afternoon, two hours at work at their several employments." *

Purposes as defined by law.

Religious and moral instructions were to receive careful attention. That the religious was not neglected, is shown by the following extract from Chapter X11 of the Assembly Laws: "And to the end that poor as well as rich may be instructed in good and commendable learning which is to be preferred before wealth, be it enacted: That all persons in this Province and Territories thereof, having children and all the guardians and trustees having

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* (Wickersham's History of Education in Penn.)

orphans, shall cause such to be instructed in reading and writing, so that they may be able to read the Scripture and write by the time they attain twelve years of age."

Discussions on the Purpose of Quaker Schools.

The foregoing extracts prove conclusively that the Society of Friends, while still dominated to some extent by the ideal of the times, discerned the necessity of physical, intellectual, and moral training. I regret, however, to see so much emphasis placed upon the utilitarian phase of work, There ought to be cultivated in every school the desire for truth for its own sake. The commercial value of each study is brought too much in the foreground. In its place there ought to be placed the ideals of service to humanity and happiness of the individual. It ought to be understood that education enables the child to see and appreciate the beautiful, the good, and the true: that it enlarges his sphere of usefulness and also his own happiness. While I am thoroughly in sympathy with the movement to impart pupils the skill of hand as will be shown in subsequent chapters, yet such course ought not to be urged for its commercial value, but rather as a part of the harmonious development of all physical, mental, and moral faculties. Where so much emphasis is placed upon utilitarian value of a branch of study as these extracts seem to indicate there is danger that the intellectual development will be dwarfed. Whether this actually occured is not known, but a part of Penn's speech

points strongly that way. It would be quite possible ,
since in the attempt to correct one extreme the pendulum of
reform nearly always swings too far at first.

Discussions of Courses of Studies in Grammar Schools.

The courses of study in most Grammar Schools are not definitely known, but since their charters and the legislative enactments of that period clearly state the function of these schools, we have every reason to believe that the religious ideal and fitting for college were important factors from the first in the evolution of secondary programs. This view is confirmed by the record of the few curricula now accessable. It is also corroborated by the reports of Ministers of the Gospel who, at that period, almost invariably were inspectors of schools by virtue of their office.

An examination, therefore, of the old college curricula, requirement for admission to, and graduation from courses, will enable us to form pretty definite ideals regarding the Courses of Study in the Grammar Schools. At Harvard, the requirements for graduation were as follows:

Harvard Requirements.

Every scholar that on proof is found able to read the originals of the Old and the New Testaments, translate them into the Latin Tongue, and to resolve them logically, withal being of godly life and conversation, and at every public act have the approbation of the overseers and masters of the college is fit to be dignified with the first degree. Every

scholar that giveth up in writing a system or synopsis of logic, natural and moral philosophy, arithmetic, geometry, and astronomy, and is ready to defend his thesis of position, withal skilled in the original as above said, and of goodly life----is fit to be dignified with his second degree." *

Requirements of other colleges.

At William and Mary's, Yale, and King's Colleges the foregoing requirements also sufficed for their respective degrees. The fact that one of the prime functions of these colleges was the preparation of young men, for the ministry, had a very decided effect upon the curricula. Concerning these not all is known. Harvard's record is the most complete in this respect and from partial records left by others and also from extraneous sources, we see that Harvard's curriculum was typical of all similar institutions in the new world.

Harvard Curriculum.

The course at Harvard covered three years. It included the equivalent of four years of Greek, one year of Hebrew, Chaldee, and Syriac, two years each of logic, ethics, and politics, two of mathematics(elementary arithmetic and geometry), a little of physics and Bible study three years. History was taught by lectures a few weeks in the winter and botany received the same treatment during the summer. Latin was not studied, since its mastery was one of the admission requirements, but students were compelled to use it

* (History of Mass. Colleges).

in conversation instead of the mother tongue. Under President Lerevett (1707-1724) improvements were started in the curriculum and these were continued under his successors. First of all, Latin ceased to be mandatory in conversation and Virgil and Cicero found a place in the curriculum. Chaldee and Syriac were dropped. The instruction in physics was somewhat extended and a little of geography was introduced. Just prior to the Revolution the first attempt was made to organize the instruction into departments. Four groups were founded; Greek, Latin, Mathematics and Natural Philosophy, Logic and Metaphysics, each under the exclusive control of one head.

Formation of Departments.

Was the Course Liberal?

This course of study when measured by present colleges seems narrow and inadequate, yet the education received there, deserved the term "liberal" accorded it, since the instruction in the classics and oriental languages was thorough, systematic, and advanced. Any study, when systematically pursued, and including its advanced stage, affords excellent mental discipline and long continued intimate contact with the best representatives of the Roman and Greek civilizations could not help but produce culture. This was supplemented by thorough study of the Bible,- a course very efficient in character building. That the study of the classics and of Scripture were main staples, in strict accordance with the ideals of the period is further borne out

by fragments of reports.

Students began with their exercises at six in the morning, and were kept hard at work the whole day. Now, since the course in mathematics consisted of two hours instruction per week in arithmetic and geometry, with a little introduction to mathematical astronomy during the junior and senior years, and the courses in philosophy and the other sciences were more meager still it becomes evident that considerable time for one group of studies was at the disposal of the hard working students. Such course must result in power and the nature of the group was excellent in producing culture.

Entrance Requirements.

College entrance requirements also throw important side light upon the curricula of the early secondary schools. It is safe to assume that they did not embrace much more in their course of study than what was demanded by the colleges, since one of the avowed purposes of each of these schools was the preparation of the youth for the college. The requirements for admission to Harvard were typical of all. In 1643 they demanded, as shown before, power to read and translate at sight Tully and the other Roman authors, to speak true Latin in prose and verse extemporaneously, and power to decline perfectly the paradigms of Greek nouns and verbs. No knowledge of history, geography, English, nor arithmetic, not even if the multiplication tables was required.

Decline of Humanistic Ideal.

At the beginning of the nineteenth centruy in consequence of the tendency of the times, the humanistic ceased to be the exclusive ideal, thus making room for the study of history and geography and the mother-tongue, and also more room for the study of the natural science and mathematics. This new tendency found expression in modified curricula. In 1802, Columbia College offered the following typical course of study:

Courses of Study at Columbia College.

First Year.

Latin
English
Sheridon's Lectures on Elocution.
Greek
Arithmetic
Written Exercises.

Second Year.

Geography
Conic Sections
Trigonometry
Mensuration
Selections from Classics
Algebra
Euclid, Elements
Surveying Navigation
Logic
Rhetoric.

Third Year.

Astronomy
Higher Mathematics
Elements of Criticism.
Natural and Moral Philosophy.

Fourth Year.

Selections from Ancient and Modern History.

Stewart's Elements of the Philosophy of the Mind.

Lock's Essay on Human Understanding.

Principles of Criticism and Application.

Reviews.

Effect upon Secondary Schools.

Improvements in higher education soon work downward affecting not only the secondary, but also through them the elementary schools. This is natural. The modified course of study demands a modified preparation in secondary schools. These, in turn, in order to meet the changes must demand of the students entering them, power in accordance with the new tendency and this power is almost invariably acquired in elementary schools. Harvard, in 1841 eased up on its classic requirements and demanded a knowledge of arithmetic up to, and through the rule of three. To this was added in 1816 ancient and modern geography. Strange to say, English was not required for admission to any course in Harvard until 1873.

College courses and entrance requirements give us a fine idea of the upper limit of instruction in the average school. If the status of elementary instruction during this period were definitely known, the field for the secondary would be fairly

well defined. There is no doubt that the first Grammar Schools took the children at school age and taught them to read and write the English language. The Roxbury Latin School in 1663, excluded from its course the so-called A-B-C-classes, and thus gave the first formal recognition that the pupils must have the power to read and write English before they could be admitted to the Grammar Schools. Many of these schools, however, contained mixed grades up to 1818 with comprehensive courses in elementary and secondary instruction and excluding only the A-B-C darian classes. .

Books and Methods.

Most of those schools, especially in New England, prepared for College. Students brought to them a Psalter and a Bible which formed the basis of the religious instruction. They were taught some ciphering. Instruction in this branch was meager. Any person who could handle fractions well, was considered an expert mathematician. Latin formed the staple mental pabulum. Cheever's Latin Accidence and Lilley's grammar with its twenty-five kinds of nouns, seven genders, fifteen pages of rules for gender and exceptions, and twenty-two solid pages of declensions of nouns were all committed to memory at the point of the ferule. This was followed by reading Corderious, Aesop, Eutropius, Caesar, Ovid, Virgil, Cicero, and by Latin composition in prose and verse. The Latin was supplemented by instruction based upon Greek grammar, Greek Testament, and Homer.

Boston Public Latin Schools.

Grammar Schools whose sole purpose was the preparation of students for college, were dominated entirely by the classic ideal as is shown by the appended program of the Boston Public School for 1776.

First Year.

Cheever's Accidence
Nomenclatur
Ward's Latin Grammar or
Eutropius.

Corderoy
Aesop
Latin and English.

Second Year.

Clark's Introduction
Selecti Veteri Testimenti
Dialogues
Making of Latin Prose.

Ward's Latin Grammar
or Eutropius
History or
Castalios.

Third Year.

Caesar
Ovid
Greek Grammar

Tully's Epistles and
Offices
Virgil
Making Latin from King's
Heathen Gods.

Fourth Year.

Virgil

Cicero's Oration

Greek Testament
Homer
Latin Prose continued.
Horace
Gradus and Parnasum.

No important change was made in this program until 1814. It will be seen at once that it did not differ essentially from that of European schools of which Sturm's at Strassburg, and Eton in England were examples. The foregoing represented the extreme of the classic ideal in secondary schools in America as did Sturm's in Europe. The majority of the schools, however, had their classic programs tempered with utilitarian studies. New York in 1702 enacted a law to start a public Latin School in which "English, Latin, and Greek tongues or languages and also the arts of writing and arithmetic were to be taught. A number of others based upon the same plan, followed speedily.

Mathematics in Curricula.

There is no record concerning the study of algebra, geometry and natural sciences in secondary schools proceeding the Revolution. This need not surprise us when we consider that algebra during that period was unknown even in the Harvard curriculum, and that only two periods per week for two years were given to mathematics, consisting of arithmetic and elementary geometry.

Ideals of Colonial Grammar School not suitable for our age.

The religious ideal and fitting for college were the two potent factors in the evolution of the Grammar School Programs. When the college ceased to be main-

ly a seminary for the education of ministers of the Gospel, the religious ideal in the preparatory school received less attention, and more time was given to classics, These evidently were thoroughly mastered. The schools reached their ideal frequently by means which would not pass muster in modern education. What has been said of the value of the classical education when the programs of colleges were discussed, applies also here yet for our industrial civilization such ideal no matter how attained would be entirely out of place. It does not utilize important avenues leading to complete happiness, and thus leaves a tendency to one-sidedness interferring seriously with complete living. "In our age with its complexity of human relations, the languages of Greece and Rome can never again be considered as they once were--almost the sole requisite of a liberal education." *

* (Dr. Chase's "Liberal Education").

Chapter lV.

Secondary Schools of the National Period.

Decline of Grammar Schools.

The decay of scholastic curricula beginning in our colleges about 1789, produced a decided decline in the popularity of the Grammar School. In fact, it fell into great disfavor in many places. Laws and regulations making schools of this grade mandatory were frequently evaded if possible. Others paid the fine exacted by the law since it was cheaper to pay the fine than to maintain the school. The grammar schools were probably to blame for this antagonistic feeling, because they did not adapt their courses to the changed condition but insisted upon the old course evident-ly in the hope that the "good old times" would return. Those of them that did adapt themselves to changed conditions, survived.

Rise of Academies.

The place of the Grammar School was filled by institutions denominated academies. These were private enterprises at first, but later on were incorporated and many became well endowed. Some received state aid as those in New York, by complying with certain regulations respecting courses of study. Many were called into existence as denominational schools by different churches. The Quakers established one at West Town in 1799 with a course of study drawn up in 1769 providing for instruction in "reading, writing,

arithmetic, navigation, surveying and such other learning as is usually taught, and parents may direct, and likewise in the Latin, Greek, French languages." The Moravians established one at Bethlehem and one at Nazareth, Penn. with courses of study, equipments, and teachers which placed them among the best established schools in America. Other denominations also established schools in many places. *

Function of Academies. Nearly all academies prepared for college, yet the most had extensive programs providing a somewhat liberal training for both sexes. Among others, English, Latin, Greek, French, writing, geography, rhetoric, arithmetic, practical geometry, logic, and philosophy were offered. The extended courses made them popular. At the beginning of the nineteenth century they were found in nearly every state. Massachusetts and New York had nineteen each.

Origin of Academy. The academy probably originated in Scotland which had schools like these in her principal cities as early as the twelfth century. Milton described in his "Tractate" a complete and generous education as "that which fits a man to perform justly, skillfully, and magnanimously, all the offices, both private, and public of peace and war" and recommended that less time be bestowed on grammar, and sophistry, and that an academy be established which should be both school and university. * *

*(Historian-Academies, Winterbotham).

** = (Boone's Education in the United States. p. 71.)

The academies were under the special protection of the dissenters who greatly aided them in England and also introduced them in Massachusetts as early as 1763. The programs of these institutions were a decided improvement upon those of the Grammar Schools. They greatly simplified the question of appropriate courses of study for High Schools, when, in the evolution of the American School System, public sentiment favored the establishment of secondary schools free from church control, and under direct control of the people.

Decay of Academy.

With the rise of the Modern High Schools the academy decayed. Some remained as feeders of denominational colleges. Their decay was hastened by the fact that they were mostly under church control.

Influence of Statesmen.

Influence of Washington.

The cause of the popular education is greatly indebted to Washington. In his message to Congress in 1790 he pleaded the cause of education as follows: "There is nothing which can better deserve your patronage than the promotion of science and literature. Knowledge is in every country the surest basis of public happiness. In one, in which the measures of government receive their impression so immediately from the sense of the community, as in ours, it is proportionally essential." *

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* (Public Documents.)

The influence of messages like these and of his farewell address in speaking of public opinion cannot be overestimated.

Of John Adams.

John Adams likewise paved the way for the modern High School as will appear from the following extract from his inaugural address: "The wisdom and generosity of the Legislature in making liberal appropriations in money for the benefit of schools, academies, and colleges, is an equal honor to them and their constituents; a proof of their veneration for letters and science, and a portent of great and lasting good to North and South America and to the world." *

Of Thomas Jefferson.

Thomas Jefferson, another staunch and powerful friend of liberal education greatly influenced public sentiment in its behalf. He declared in the Ordinance of 1789 that "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and means of education shall forever be encouraged" and then provided for the grants of public land, the proceeds of whose sales have greatly simplified the working out of the educational problems in the Northwestern states by relieving the people somewhat of the burden of elementary education and thus enabling them to pay early attention to secondary instruction. At another time he said, "I look to the diffusion of light and education as the resources most to be relied on for ameliorating the condition, promoting the virtue, and advancing the

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* (Public Documents.)

happiness of man. And I do hope, in the present spirit of extending to the great mass of mankind the blessings of instruction, I see a prospect of great advancement in the happiness of the human race, and this may proceed to an indefinite although not an infinite degree. A system of general instruction, which shall reach every description of our citizens, from the richest to the poorest, as it was the earliest, so it shall be the latest of all the public concerns in which I shall permit myself to take an interest." *

The foregoing were instrumental not only in preparing the way for our higher schools, but also in shaping their policy. It aided in becoming People's colleges in fact as well as name.

* (Public Documents.)

Chapter V.

Modern High School.

Origin of the Modern High School.

The Boston Public Latin School is the oldest of the existing high schools. Its courses, given on another page, were thoroughly classical. Boston also claims the honor of establishing the first English High School on this continent. It was organized in 1821 and was designed for those not purposing to go to college. Its courses of study covering a period of three years and the names of the text books used at first are as follows:

Course of Study of first English High School.

First Year.

1. Intellectual and written Arithmetic, Colburn and La Croix.
2. Ancient and Modern Geography by Worcester.
3. General History by Tyther; U. S. History by Goodrich.
4. Elements of Arts and Sciences by Blair.
5. Reading, Grammar Declamation.
6. Book-keeping, Double and Single Entry.
7. Sacred Geography.

Second Year.

8. Reviews of studies of preceding year.
9. Algebra, by Colbourn.
10. Rhetoric and Composition by Blair's Lectures.
11. Geometry by Legrnder.
12. Natural Philosophy.
13. Natural Theology by Paley.

Third Year.

14. Reviews.
15. Moral Philosophy, Paley.
16. Forensics.
17. Criticisms on English Authors.

Discussion of Program.

The program is a utilitarian one allied to our business courses, but still retains a vestige of the old religious ideal. It omitted foreign languages and civics. Yet in spite of these serious omissions this program showed a fair comprehension, on the part of its framers, of the needs of the time.

First New York High School.

New York, in 1825 organized a High School for boys and girls. Its promoters evidently had profited by Boston's experience. They had a course of study including reviews in lower branches and instruction

in pure and applied mathematics including trigonometry and surveying, natural philosophy, chemistry, natural history, Latin, Greek, French, Spanish, and gymnastics.

Discussions of Program.

Its most serious omissions were music, history, and civics, yet on the whole this course is an improvement upon Boston's first school. It gave electives, thus enlarging upon the ideal of the first High Schools, by affording opportunity for preparation for higher education as well as for business.

Recognition of High Schools as a Part of the Public School System.

Massachusetts, however, soon took the lead again, and by law in 1826 formally recognized the modern High school as part of the public school. By this law, every town containing five hundred households is required in addition to the prescribed course for the elementary schools to offer instruction in General History, Book-keeping, Geometry, Surveying, Natural History and Philosophy, Chemistry, Botany, Civics, polity of Massachusetts and the U. S. and Latin. Every town of four thousand inhabitants is required to have High School teachers qualified to give instruction in the following branches:

Greek
French
Astronomy
Geography
Rhetoric
Logic
Intellectual and Moral Science
Political Economy

Since 1894, every town of twenty thousand or more must offer in addition to the foregoing branches a course in Manual Training consisting of Free hand and Mechanical Drawing, Carpentry, Wood turning and Pattern Making, Molding, Forging, Chipping, filing and machine shop practice.

Administration of Courses. Details and actual working of school course are nominally left to the local boards, but are virtually determined by the college entrance requirements, except the general course for pupils who do not purpose to go higher.

Growth of High School Sentiment. Ever since the formal recognition of the High School in Massachusetts in 1826 as part of its educational system it has made rapid strides. Worchester established one in 1827; Salem in 1828, Bridgeport, Conn. in 1827, Providence, R. I. in 1828; Genesa, N. Y. in 1827; Lowell in 1831; Famous Central High School, Philadelphia in 1837, Cincinnati in 1847; St. Louis in 1853; Chicago in 1856; Detroit in 1858. About this time they were recognized as part of the public school system in all states. In the West, especially, their growth has been phenominal for a new country. Wisconsin alone has about two hundred High Schools. This is due in large part to Jefferson's wise provision in the Ordinance of 1789 and to the generosity of Congress in setting apart additional tracts of land for educational purposes.

Present Ideals of Education as Shown by Courses of Study.

The evolution of High School Curricula in Massachusetts was given on a foregoing page. For our purpose it will suffice to show what their present status is in representative states instead of tracing their development in all sections. Since aims and ideals of schools always find expression in courses of study, an examination of these will show what is considered the function of High Schools.

New York.

Course recommended by State Supt. Skinner to be adopted by each High school or academy in the state to enable their graduates to be licensed in or employed by any city having a superintendent of schools to teach in the public school thereof.

A three years course of study in a High School, in order to receive the approval of the State Superintendent of Public Instruction, as required by chapter 1031 of the Laws of 1895, entitled "An act to encourage and promote the professional training of teachers," should include the following as a minimum requirement.

1. English, three years, or 300 recitations. The English course should include Grammar, Rhetoric, Literature, and Composition. The work in Literature should cover at least the ground required for admission to college by the Association of Schools and Colleges of the Middle States and Maryland.

2. Mathematics, three years or 300 recitations. The mathematical course should include Algebra to the end of Quadratic Equations, Plane Geometry, and a review of Arithmetic.
3. A foreign language, Latin, French, or German, three years or 300 recitations. The course should include at least the grammar of the language and the translation at sight of simple prose and poetry into idiomatic English.
4. History and civics, three years or 200 recitations. The course is to include English, Greek, and Roman History, with the intensive study of Civics and some special period of American History.
5. Physiology and Zoology, one year or 100 recitations.
6. Geography, Physical and Mathematical, one year or 100 recitations.
7. Vocal music, three years or 100 recitations. The course should include vocal culture (in class), sight-singing from the staff, and the common technical terms used in vocal music.

South Carolina.

Parallel Courses of Study for High Schools. Nos. 2, 3, 4, to articulate with the Colleges.

No. 1.	No. 2.
English	Modern Language and Scientific.

First Year.

No. 1.	No. 2.
English.	English
Algebra.	Algebra.
Zoology or Physiology.	Zoology.
Greek and Roman History.	Greek and Roman History.

No. 3.	No. 4.
Latin and Scientific.	Classical.
English.	English
Algebra.	Algebra.
Latin.	Latin.
Greek and Roman History.	Greek and Roman History.

Second Year.

No. 1.	No. 2.
English.	English.
Algebra.	Algebra.
Botany or Physical Geography.	Botany or Physical Geography.
(English History & Civil Government.) or (Modern History.)	(English History & Civil Government) or (Modern History).

No. 3.

English.

Algebra.

Latin.

(English History & Civil Government) or

(Modern History).

No. 4.

English.

Algebra.

Latin.

(English History & Civil Government) or

(Modern History).

Third Year.

No. 1.

Geometry.

Physics.

Modern or English History.

Civil Government.

No. 2.

Geometry.

Physics.

German or French.

No. 3.

English.

Geometry.

Physics.

Latin.

No. 4.

English.

Geometry.

Latin.

Greek.

Fourth Year.

No. 1.

English.

No. 2.

English.

Chemistry.	Chemistry.
Economics.	German or French.

No. 3.	No. 4.
English.	English.
Chemistry.	Physics.
Latin.	Greek.

Louisiana.

In 1896 the State Superintendent recommended this course for the purpose of securing uniformity in courses throughout the state.

First Year.

English Grammar 5.
Algebra and Arithmetic-Review 5.
Physical Geography or Latin 5.
English Composition 2.
United States History 5.
Drawing and Singing 5.

Second Year.

English Grammar 3.
Literature 3.
Arithmetic Review.
General History 1/2 year 3.
French 3.
Composition 2.
Algebra 4.
U. S. History 1/2 year 3.
Physics. 3.
or Latin 5.

Third Year.

Literature	5.	Composition	2.
Geometry	4.	Algebra Review	1.
General History	3.	Civil Government	2.
Physiology	2.		
French	3	Or Latin	5.

Fourth Year.

Literature	5.	Rhetoric & Composition	5.
Geometry	4.	Algebra Review	1.
General History	2.	Chemistry	3.
French	3.	Latin	5.

Commercial Arithmetic and Book-keeping may be substituted for Algebra and Geometry the last 1/2 year.

Colorado.

Ancient Classical. Algebra through Quadratics, Plane Geometry, Latin Lessons with Grammar, Caesar, four books, Virgil six books, Cicero seven orations, Prose Composition, Greek Grammar, Xenophon Anabasis four books, Homer's Iliad three, Prose composition, German or French one year, Ancient History, English equivalent to requirements of the New England Association of Colleges.

Scientific. Plane Trigonometry, or Solid Geometry additional, Latin or German continues or is divided between two. General History, English as above, Physics, Chemistry and Biology one year each, Botany, Physiography, Geology, 1/2 year each. Latin to alternate with Biology. Drawing Free Hand and Mechanics. The Latin Scientific is a medium between the two courses.

Wisconsin.

Four Years Courses.

English and General Science.

First Year.

First Term.	Second Term.	Third Term.
English Grammar.	Composition.	Composition.
Physical Geography.	Physical Geography.	Botany.
Algebra.	Algebra.	Algebra.

Literary Readings.

Second Year.

Botany.	Physiology.	Physiology.
U. S. History.	U. S. History.	Constitutions.
Arithmetic.	Bookkeeping.	Arithmetic.

Literary Readings.

Third Year.

First Term.	Second Term.	Third Term.
Geometry.	Geometry.	Geometry.
History.	History.	History.
German or Political Economy.	German or Word Analysis.	German or Rhetoric.

Literary Readings.

Fourth Year.

English Literature.	English Literature.	English Literature.
Physics.	Physics.	Physics.
German or Mental Science.	German or Reviews.	German or Theory and Art.

Literary Readings.

Modern and Ancient Classical.

N. B. - These are to be used only in connection with the English Course. In case either is adopted it will be necessary, in order to save recitations, to transpose Geometry and Arithmetic-Bookkeeping, placing the former in the Second Year. The one term of the Third Year Arithmetic should be, in the English and Scientific Courses, devoted to Algebra and Geometry. This is the more logical arrangement.

First Year.

First Term.	Second Term.	Third Term.
English Grammar.	Latin.	Latin.
Physical Geography.	Physical Geography.	Botany.
Algebra.	Algebra.	Algebra.

Literary Readings.

Second Year.

Latin.	Latin.	Latin.
U. S. History.	U. S. History.	Constitutions.
Plane Geometry.	Plane Geometry.	Solid Geometry.

Literary Readings.

Third Year.

Latin.	Latin.	Latin.
History.	History.	History.
German or Greek.	German or Greek.	German or Greek.

Literary Readings.

Fourth Year.

Latin.	Latin.	Latin.
Physics.	Physics.	Physics.
German or Greek.	German or Greek.	German or Greek.

Literary Readings.

Other States.

In California the formulation of courses of study is left to the local school boards, but in cities they must be approved by the County Board of Examiners. The State University requires at least a three years course of study for admission. Connecticut, Deleware, and wyoming also leave the planning of courses to local boards but many have courses that articulate with the universities. Texas and Virginia have no statutes relating to secondary schools and only a few of their High Schools have courses in conformity with the college entrance requirements. Michigan, the Pioneer in accrediting High Schools provides no uniform course, yet most of her schools are accredited showing that some uniformity exists in their courses.

Function of High Schools as expressed by programs.

Some state departments furnished with the courses formulated by them, the aim to be attained. In all cases the courses show that their framers had definite aims in view. In general they are preparation for business, for citizenship, and for college. The courses are fairly well framed for realization of these ideals.

Discussion of functions.

Wisconsin, New York and a large number of other states desire the High School also to prepare students for teaching in the elementary schools. This is entirely out of place. The High School ought not to be a professional school. Why not ask them to turn out physicians

Discussion of programs.

or lawyers? This would be just as logical. The aims are all rather one-sided but a discussion of what the writer considers the proper function of the High School will be given in a subsequent chapter. College requirements and uniform courses of studies recommended by State Departments have done much to elevate the efficiency of the High School. The courses now offered, are a great improvement in kind and number of subjects offered over those of twenty years ago. Yet this multiplicity of subjects on the other hand has the serious drawback of producing scrappy programs. This criticism applies to a greater or lesser degree to all the programs examined of which those given on the preceding pages are fair examples. With the exception of the languages, no study is pursued long enough to enable the student to derive from it the educational value it possesses. It is now generally conceded by educators that programs should be arranged for the purpose of imparting power to students instead of information, and that any large subject whatever, to yield its training value, must be pursued from three to five times a week for several years. In view of this, think of allotting to botany one term.! Then again these courses take into consideration, intellectual training only.

Criticism on Colorado's Course.

The Colorado Course prepared by its state department purports to embody in its essentials the best preparation for active duties of life and likewise to

serve as an adequate preparation for admission to Colorado Colleges. The scientific course is fair, but it is absurd to believe that its classical course with only a little mathematics and no natural science whatever, nor any instruction in Civics, can and does furnish the training claimed for it. If civics were substituted for Ancient History it would improve the course some. The classics themselves furnish an abundance of ancient history, thus obviating the necessity for giving additional instruction in this subject.

Criticism on Wisconsin's Course.

Wisconsin's courses rank fairly well as to number of subjects to be pursued. Bookkeeping, in my opinion ought to be relegated to the grades for reasons that will be given later. Physiology also ought not to be studied in the High School. This subject in order to yield its training value must be studied experimentally. This is not feasible in High School, hence it is taught dogmatically and such subjects can well be finished in grades, thus leaving more time for other branches. The courses are weakest in the arrangementof the studies. History is to be finished in one year, etc. An arrangement like this is conducive to the formation of habits of cramming. There is not sufficient time for mental growth. They become informational studies merely. It would be far better to extend the time by using alternation of studies. This would keep the minds longer in contact with the

subjects, it would afford the student an opportunity to let his consciousness play about the different phases of the subject and in this way secure better results for him.

Louisiana's Course.

The course of study of Louisiana attracts attention on account of the absence of the multiplicity of science and German. Prof. Fortier strongly recommending this course says that " trigonometry, geology, zoology, and botony are out of place in a High School curriculum. The crying complaint over the whole country is that the schools by attempting more than they can do well, do nothing thoroughly." The latter remark is sad but true. Yet room can be made for the subjects mentioned and still do thorough work in all subjects. This will be considered in another chapter.

Committee of Ten.

No discussion on courses of study is at all adequate unless the programs of the Committee of ten are embodied in it. They are the result of much hard labor bestowed upon them by some of the leading educators of this country.

The programs are as follows:

Classical. Three foreign languages (one modern).		Latin-Scientific. Two foreign languages (one modern).	
	First Year.		
Latin	5.	Latin.	5.

Classical.		Latin-Scientific.	
Three foreign languages (one modern).		Two foreign languages (one modern).	
Algebra	4.	Algebra	4.
History	4.	History	4.
Physical Geography	3.	Physical Geography	3.

Second Year.

Latin	5.	Latin	5.
English	2.	English	2.
* German(or French) begun	4.	German (or French) begun.	4
Geometry	3.	Geometry	3.
Physics	3.	Physics	3.
History	3.	Botany or Zoology	3.

Third Year.

Latin	4.	Latin	4.
* Greek	5.	English	3.
English	3.	German (or French).	4.
German (or French)	4.	Mathematics Algebra 2 Geometry 2	4.

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* In any school in which Greek can be better taught than a mod

Mathematics Algebra 2. Geometry 2.	4.	Astronomy 1/2 yr. & Meteorology 1/2 yr.	3.
		History	2.

Fourth Year.

Latin	4.	Latin	4.
Greek	5.	English as in Classical 2. additional 2.	4.
English	2.		
German (or French)	3.	German (or French)	3.
Chemistry	3.	Chemistry	3.
Trigonometry & Higher Algebra or History	3.	Trigonometry & Higher Algebra or History	3.
		Geology or Physiography 1/2yr. and Astronomy, Physiology, & Hygiene 1/2 yr.	3.

Modern Languages.	English.
Two foreign languages (both modern).	One foreign language (ancient or modern).

First Year.

French (or German) begun	5.	Latin, or German, or French	5.

ern language, or in which local public opinion or the history

English	4.	English	4.
Algebra	4.	Algebra	4.
History	4.	History	4.
Physical Geography	3.	Physical Geography	3.

Second Year.

French (or German)	4.	Latin, or German, or French,	5 or 4.
English	3.	English	3 or 4.
German (or French) begun	5.	Geometry	3.
Geometry	3.	Physics	3.
Physics	3.	History	3.
Botany or Zoology	3.	Botany or Zoology	3.

Third Year.

French (or German)	4.	Latin, or German, or French	4.
English	3.	English as in others 3 additional 2.	5.
Mathematics Algebra 2 Geometry 2	4.	Mathematics Algebra 2 Geometry 2	4.
German (or French)	4.	Astronomy 1/2 yr. & Meteorology 1/2 yr.	3.
Astronomy 1/2 yr. & Meteorology 1/2 yr.	3.		

* of the school makes it desirable to teach Greek in an ample

History	2.	History as in Latin-scientific 2 additional 2	4.

Fourth Year.

French (or German)	3.	Latin, or French, or German	4,
English as in classical 2 additional 2.	4.	English as in classical 2 additional 2	4.
German(or French)	4.	Chemistry	3.
Chemistry	3.	Trigonometry & Higher Algebra	3.
Trigonometry & Higher Algebra or History	3.	History	3.
Geology or Physiography and Anatomy, Physiology, & Hygiene. 1/2 yr.	3.	Geology or Physiography and Anatomy, Physiology, & Hygiene 1/2 yr.	3.

* way, Greek may be substituted for German or French in the second year of the Classical programme.

Criticism on Courses.

These programs fairly represent the scope and arrangements of studies in our best High Schools. They already have done much to elevate and unify the work in these institutions. When the standard set by them has been attained, a higher standard will arise. All programs of the future must provide for continuous instruction in science. This the classical program does not provide. It provides for instruction in history. This is an error. The time devoted to the study of this branch ought to be given to another, since the classics furnish much historic knowledge and training. The short time allotted to several important branches is also a serious drawback.

The writer's experience in framing courses.

It may be presumption on my part to call attention to these defects and I am free to admit that I cannot improve upon them without going back into the grades for starting and partly finishing some of the branches given in these programs. While holding the office of supervising principal in one of Wisconsin's cities, an opportunity was accorded me to embody my ideas regarding this phase of educational work by getting out a High School program that would meet my ideal and at the same time satisfy the requirements of the department of Public Instruction, the State University, and the expectation of the community. By sacrificing important components of my ideal and providing that some branches, usually taught only in secondary

schools were well started in the grades, a course of study was formulated which I consider superior in several respects to any of those given. This superiority is due in large part to the course in the grades. In order to show the scope of the program for the High School it is necessary to view briefly at least the essentials of the course for the grades, since this forms the foundation for the secondary.

Course of Study for Mayville City Schools.

Reading.

First Grade.

1. Instruction by the sentence, word and phonic methods. Use objects, pictures and blackboard. Follow with the charts and finally use the First Reader.
2. Supplementary reading; long and short sounds of a and e. Use every natural device as colored crayons, objects, questions, etc., to awaken interest. Secure good articulation and expression.

Second Grade.

1. Finish First Reader; Second Reader.
2. Supplementary reading; long and short sounds of all vowels; training in articulation, inflection and expression. Endeavor to make the reading as much like good conversation as possible. Get the thought.

Third Grade.

1. Second Reader completed; Third Reader.
2. Second Grade(2); sounds of a; meaning of words by definition, synonyms or use in sentences.

Fourth Grade.

1. Finish Third Reader.
2. Third Grade outline (2); other sounds and markings of e and i.

Fifth Grade.

1. Fourth Reader. Supplementary reading.
2. Diacritical marks finished, use dictionary; training in securing accurate and correct pronunciation, a well cultivated voice, and pleasant, natural expression.

Sixth Grade.

1. Complete Fourth Reader; selections from text books.
2. Fifth Grade (2); supplementary reading; books for home reading.

Seventh Grade.

1. Selections from text books; supplementary reading.
2. Fifth and sixth grades (2). Training in securing incisive but fluent utterance, an intelligent use of modulations

appropriate to the sense and sentiment, and a clear comprehension of the drift and scope of the paragraph or selection.

Eight Grade.

1. Selections from text books for study; supplementary reading; books for home reading.
2. Outline for preceding grades. Drill to secure results mentioned.

Spelling.

All Grades.

1. Complete the mastery of all words in regular readers and texts, work to be oral and written.

   Keep list of words frequently misspelled and mispronounced and give drills from the list.

Writing.

First Grade.

Copying from blackboard; proper position of body and hand.

Second Grade.

First Grade (1). Copying from books; use pencil and paper; secure legibility.

Third Grade.

1. Movement exercises; combinations! Pen and ink.

2. Practice Blank; Copy Book No. 1.

Fourth Grade.

1. Third Grade (1); Practice Blank; Copy Book No. 2.

Fifth Grade.

1. Third Grade (1); Practice Blank; Copy Book No. 3.
2. Business forms.

Sixth Grade.

1. Third Grade (1); Practice Blank; Copy Book No. 4.

2. Business forms; letter writing; compositions.

Seventh Grade.

1. Third Grade (1). Copy Book No. 5. Business forms; letter writing; compositions.

Eighth Grade.

1. Business forms; letter writing; compositions.

In all grades aim first at securing neatness and legibility and then rapidity. Insist upon neat work in all written exercises.

Arithmetic.

First Grade.

1. Object exercises in numbers; notation and numeration to 100.
2. Easy fundamental operations with sums, minuends, products and dividends not to excel 20, and multipliers, subtrahends and addenda up to 4 or 5.

Second Grade.

1. Notation and numeration to 1000; tables of twos, threes and fours.
2. Fundamental operations. Easy problems. Book 1. Prince's Arithmetic.

Third Grade.

1 Notation and numeration to 10,000; tables to the nines.
2. The 45 combinations mastered; Federal money; Book 11.

Fourth Grade.

1. Notation and numeration as far as necessary; Federal money reviewed.
2. Fundamental operations thoroughly mastered; Book 111. Problems.

Fifth Grade.

1. Needed Reviews; bills; Book 1V.

Sixth Grade.

1. Needed Reviews; bills; Book V.

Seventh Grade.

1. Needed Reviews; Book Vl.

Eighth Grade.

Arithmetic alternates with Algebra.

1. Needed reviews in fractions, percentage, and mensuration; square root and its application.
2. Elements of Algebra, fundamental operations, factoring, G. C. D., L. C. M., fractions and simple equations. Wentworth's First Steps in Algebra.

Secure accuracy and rapidity in all mathematical work. Principles to be made clear by means of oral work and problems. Drill pupils in constructive work in the formation of problems and solution of same.

Geography.

First Grade.

1. Place-Use objects to teach the terms right, left, above, below. etc.

Direction-Exercise in direction, beyond, toward, etc. Cardinal

Points. Combine with language work in First and Second Grades.

Second Grade.

1. Review First Grade work.
2. Weather,-Rain, snow, ice, clouds, sun. Form and use.
3. Plants,-Wheat, oats, coffee, rice. Growth and use. Plant a few seeds in school room and have pupils observe.
4. Animals,-Cat, dog, horse, cow, squirrel, mouse. Form, use, covering, dwelling, adaptation of body, life, stories about their habits.
5. Diagram of school room, house and grounds with points of compass.

Seven Little Sisters. Read to class.

Third Grade.

1. Review Second Grade work; bear, lion, fish, robin, insects; corn, potatoes, articles of clothing; occupation of people in Mayville.
2. Locate on map places mentioned in stories; geographical forms taught by means of sand board.
3. Frye's Primary Geography to page 79. Read it in class.
4. Read Each and All.

Fourth Grade.

1. General review of Third Grade work.
2. Finish Frye's Primary Geography.
3. Map drawing. North and South America. Molding.
4. Read extracts from books of travel.

Fifth Grade.

1. Werner's Geography to page 130; drawing maps and molding.
2. Books of travel.

Sixth Grade.

1. Finish Werner's Complete Geography; map drawing and molding.
2. Books of travel.

Seventh Grade.

1. Comparative Geography. Three-fifths study. Drill on industrial and educational centers and on places of historic interest; manners and customs of people.

HISTORY AND NATURE STUDY.

To be taken in connection with language work.

First Grade.

1. Stories about the boyhood of great men as Columbus, Franklin.

Washington, Lincoln.

2. Geography Grade I (1 and 2).
3. Study sand, clay, fruits.

Second Grade.

Review First Grade Work.

2. Geography, Second Grade (3-4).
3. Continue work under (1) First Grade outline; time by the clock.
4. Parts of the body; five senses.

Third Grade.

1. Fifth famous Stories-Baldwin.
2. Geography, Third Grade (1 and 3).
3. Observation of plants as the seasons change.

Fourth Grade.

1. Stories of Columbus; The Indians.
2. Birds; migratory, non-migratory.
3. Trees; wood, barks, buds.

Fifth Grade.

1. Colonial history of Virginia, Massachusetts and Pennsylvania.
2. Biographies-George Washington and Longfellow.

3. Kinds of soil. Effects of frost on different soils. On plants.
4. Study of willow, oak, maple, violet, marsh-marigold, Jack-in-the-pulpit.
5. Work in geography pertaining to plants, etc.

Sixth Grade.

1. War of Independence; biographies of Franklin and Alexander the Great.
2. Protection of buds. Study of pine, elm, poplar, blood root, evening primrose, anemone, limestone, granite, quartz, flint, mica.
3. Transformation of insects.
4. Metals-Iron, copper, lead, tin, gold, silver.
5. Topics in geography.

Seventh Grade.

1. American inventions; historical literature, as Paul Revere's Ride, Barbara Fritchie, Sheridan's Ride, Lincoln's Gettysburg Speech, Evangeline, etc.
2. Biographies of Jackson, Lincoln; Hawthorne, Hannibal.
3. Topics in geography.
4. Study of locust tree, quince, ash; shepherd's purse, oxalis, crane's bill, dog-tooth violet; gneiss, galena iron ores,

calcite.

5. Physiology.

Eighth Grade.

1. Scudder's U. S. History. Biographies of Charlemagne and Peter the Great.
2. Review of textile fabrics, fuel, uses of animals, food and medical plants.
3. Reading of barometer and thermometer in regard to changes of weather; study of Weather Bureau Maps.
4. Study of chestnut tree, box-elder, bass-wood, trillium, toad flax, mandrake, crowfoot; hornblende, pyrite, gypsum, feldspar.

PHYSIOLOGY.

Grades 1-V11.

1. Talks on hygiene, habits and morals.

Seventh Grade.

1. Smith's Primer of Physiology.

LANGUAGE.

In all grades correlate the work in language with the other sub-

jects, expecially geography, history, and nature study. Poems and memory gems thoroughly committed to memory. Review those of the preceding grades.

First Grade.

1. Conversation suggested by objects and pictures in reading, nature study, drawing, etc.
2. Reproduction of historical and other stories, myths, and fairy tales. Cinderella, Mrs. Wiggin 's Story Hour, Scudder's Fables.
3. Description of facts observed; memory gems.
4. Correct use of is and are, a and an.

Second Grade.

1. Review of First Grade work.
2. Conversation, description and dictation.
3. Hiawatha's Childhood. Short memory gems.
4. Nature study and history. See outline.
5. Reproduction of stories and myths. Hawthorne's Wonder Book.

Correct use of was and were, this and that, these and those, of forms of freeze, tear, write, go.

7. Terminal marks.

Third Grade.

1. Review work of Second Grade. Outline for history and nature study.

2. The Village Blacksmith; short memory gems.
3. Conversation, description, narration and dictation.
4. Stories reproduced. Seven Sisters Prove their Sisterhood.
5. Terminal marks; common abbreviations; common irregular verbs, correct uses of forms of personal pronouns.

Fourth Grade.

1. Review of Third Grade work; outline for history and nature study.
2. Reproduction of geographical and literary topics.
3. Barbara Fritchie; short memory gems; letter writing.
4. Irregular verbs mastered; also forms of personal pronouns, give special attention to forms of set and sit, lie and lay, raise and rise.
5. Metcalf and Bright's Language Book to page 46.

Fifth Grade.

1. Reproduction of literary, geographical, historical, and other matter. See outlines under these heads.
2. Review Fourth Grade work; text book to page 174.
3. Letter writing; constructive language.
4. Selections from Thanatopsis; short memory gems.
5. Case forms of all nouns and pronouns.

Sixth Grade.

1. Fifth Grade (1). Finish Metcalf and Bright's Language Lessons.
2. Letter writing; constructive language.
3. Psalm of Life; short memory gems.
4. Parts of speech; analysis and diagraming of simple sentences; adjective and adverbial phrases.

Seventh Grade.

1. Fifth Grade (1). Reed and Kellog's Higher Lessons in English. Lessons 1-38, 46-71, 112-129.
2. The Chambered Nautilus; short memory gems.
3. Letter writing mastered.

Eighth Grade.

1. Fifth Grade (1). Finish text book.
2. Recognition and reproduction of literary forms; abstracts and reviews.
3. The Ship of State; selections from Gray's Elegy; short memory gems.
4. Simile, metaphor, personification.

DRAWING.

First Grade.

1. Manual, Grade I.
2. Clay modeling. Cube and sphere.
3. Paper folding and cutting.

Second Grade.

1. Manual, Second Grade.
2. Clay modeling; paper cutting and folding; form study.
3. Free expression in stories illustrated.

Third Grade.

1. Manual, Third Grade.
2. Illustrating poems and stories. Free expression.
3. Geography, 1 and 3. Free expression.
4. Form of paper folding and cutting, color.

Fourth Grade.

1. Manual, Fourth Grade.
2. Illustrating stories; Indians; divisions of land and water, rivers, basins, mountain masses.

Fifth Grade.

1. Manual, Grade V.
2. Illustrative drawing in geography, history, nature study and life.

Sixth Grade.

1. Manual, Grade Vl.
2. Geography; earth as a whole; belts of animal life; belts of plant life.
3. Illustrate stories; nature study and life.

Seventh Grade.

1. Manual, Grade Vll.
2. Solar System; nature study and life.
3. Illustrate stories.

Eighth Grade.

1. Manual, Grade Vlll.
2. Form of study and construction.
3. Illustrate stories.

SINGING.

All grades: Breathing and vocal exercises. Aim at securing sweet, soft tones. Quality not volume.

First Grade.

1. Appropriate songs, learned by note; the scale learned; motion songs.

Second Grade.

1. Review First Grade work; new songs learned; staff.
2. Intervals of scales. Music chart.

Third Grade.

1. Review Second Grade work; new songs, study of intervals continued. Music Reader.

Fourth and Fifth Grades.

1. Needed reviews; new songs. Music Reader.
2. Exercises in various keys in two, three, four, and six beat measures. Work in intervals continued.

Sixth, Seventh, and Eighth Grades.

1. Work in intervals continued. Mastery of all symbols.
2. New songs; two-part music. Music Reader.

Physical Culture.

All Grades.

Marching, appropriate gymnastics and drills. Motion songs--

Lower Grades.

Setting up exercises. Military Manual--Upper Grades.

HIGH SCHOOL.

Figures indicate the number of recitations per week.

ENGLISH COURSE.

First Year.

First Semester.	Second Semester.
Arithmetic (3)	Arithmetic (3)
Bookkeeping (2)	Bookkeeping (2)
Botany (2)	Botany (5)
Greek History (2)	Greek History (2)
Readings and English (3)	Readings and English (3)
Physical Geography (5)	Electives (5)
Electives (3)	

Second Year.

Algebra (5)	Algebra (5)
Physiology (3)	Physiology (2)
Civil Government (2)	Civil Government (3)
Roman History (2)	Roman History (2)
Reading and English (3)	Readings and English (3)
Electives (5)	Electives (5)

Third Year.

Physics (5)	Physics (5)
English History (2)	English History (2)
Readings and English (5)	Readings and English (5)
Electives (8)	Advanced Grammar (3)
	Electives (5)

Fourth Year.

Geometry (5)	Geometry, Plane and Solid (5)
U. S. History (3)	Reviews (5)
Mental Science (3)	American Literature (2)
Readings and English (4)	Readings and English (3)
Electives (5)	Electives (5)

General Science Course.

First Year.

First Semester.	Second Semester.
Arithmetic (3)	Arithmetic (3)
Botany (2)	Botany (5)
Physical Geography (5)	Physical Geography (2)
German (3)	German (3)
Reading and English (3)	Readings and English (3)
Electives (4)	Electives (4)

Second Year.

Algebra (5)	Algebra (5)
Physiology (3)	Physiology (2)
Civil Government (2)	Civil Government (3)
German (4)	German (4)
Readings and English (3)	Readings and English (3)
Electives (3)	Electives (3)

Third Year.

Physics (5)	Physics (5)
German (4)	German (4)
Readings and English (5)	Readings and English (5)
Political Economy (3)	Advanced Grammar (3)
Electives (3)	Eledtives (3)

Fourth Year.

Geometry, Plane (5)	Geometry, Plane and Solid (5)
U. S. History (3)	Reviews (5)
Mental Science (3)	Readings and English (3)
Readings and English (4)	German (4)
German (4)	Electives (3)
Electives (1)	

ALL COURSES (REQUIRED).

Drawing (2)	Two Years.

Theory of Music (1)	Singing (1)

ELECTIVES.

Manual Training (4)	Manual Training (4)

Any subject in another course may be chosen as an elective, but the same subject is not to be counted as a regular and an elective study.

Drawing, theory of music and singing may be counted in making up electives.

If a sufficient number os students desire to study Astronomy(3) or Geology (3), a class will be organized and the subject then may be counted in making up electives.

SCOPE OF WORK.

The scope of work in subjects not mentioned below is to be found in the texts adopted by the Board of Education. Sciences will be supplemented by laboratory work, and other subjects by readings pertaining to the particular branch.

GERMAN.

1. Complete mastery of literary and scientific reading.
2. German Grammar.
3. Outline of German History and Literature.

READINGS AND ENGLISH.

Readings, required to be read in class.

From the elective readings the students may choose per year two novels or stories, one play of Shakespeare, and two poems or sets of poems. Discussions and reports on these at atated times.

First Year.

1. Composition (1). Text Book.
2. Readings-Required: Lady of the Lake, Christman Carol, Merchant of Venice.
3. Electives: Tale of Two Cities, Talisman, Guerber's Mythology, Irving's Sketch Book, Last of the Mohicans, Egyptian Princess, Iliad, Odyssey, Courtship of Miles Standish, Snow Bound, Tempest, Richard 111.

Second Year.

1. Composition (1). Text Book.
2. Required: Vision of Sir Launfal, The Deserted Village, Washington's Farewell Address and Rules of Conduct, Sir Roger de Coverly Papers, Taylor's Lars.
3. Electives: Quentin Durward, Twice Told Tales, Hannibal, Robinson Crusoe, Hoosier Schoolmaster, Tom Brown at Rugby, Enoch Arden, Ancient Mariner, The Traveler, Cotter's Saturday Night, Thanatopsis, Twelfth Night, Hamlet.

Third Year.

1. Composition (1). Text Book.
2. Rhetoric (2).
3. Required: Midsummer Night's Dream, Bacon's Essays, Princess, Webster's Bunker Hill Oration.
4. Electives: Benjamin Franklin, The Prairie, Forms of Water, Dombey and Son, Gulliver's Travels, Grandfather's Chair, Gray's Elegy, Evangeline, Much Ado about Nothing, Othello.
5. Advanced Grammar.

Fourth Year.

1. Composition (1). Text.
2. History of English Literature. Text.
3. History of American Literature. Text.
4. Required: Macbeth, The Prologue, Essay on Man, L'Allegro and Il Penseroso, Autocrat at the Breakfast Table.
5. Electives: As You Like It, Julius Caesar, David Copperfield, Silas Marner, House of Seven Gables, Vicar of Wakefield, Last of the Barons, Ben Hur, My Summer in a Garden, Fortune of the Republic, Flight of a Tartar Tribe, Skylark and other poems. Wordsworth and Byron-selected poems.

MANUAL TRAINING.

Free hand and mechanical drawing throughout the course.

First Year.

1. Bench work in wood-Sawing, planing, boring, tenons, mortises, joints, joinery, scroll-sawing, inlaid work.
2. Instruction on care of tools, kinds of wood, grain and strength of different kinds of wood.

Second Year.

(a) 1. Work of first year continued.

2. Wood-carving and lathe work.

3. Instruction in smelting and casting.

(b) 1. Sewing-Forms of stitches, piecing, hemming, darning, mending, patching, making, cutting.

2. Cooking-Study of foods, dietic values and combinations, uses and processes of cooking; preparation of common foods, soups, meat, vegetables, bread, tea, coffee, cocoa, cakes, pies, puddings, etc.

Third Year.

1. Needed Reviews.
2. Work in metals-Drawing, upsetting, shaping, bending, punching, cutting, welding, tempering.
3. Machine work in metals.

Discussion of Course.

Here I will summarize some of the advantages of the foregoing programs. The advan-

tages of such a continuous course of studies are apparent. The teachers in the High School know exactly what instruction the pupil has received in the subject he teaches or in related subjects. Hence there is no tiresome duplication of the work. Drawing another method of expresing and recording ideas is fairly mastered in the grades. This will greatly facilitate the work in botany, physics, etc., and also contribute toward the formation of the aesthetic and ethical ideals. A fair start is made in vocal music. This again will prove helpful in the formation of the ideals mentioned. The instruction in nature work throughout the grades trains the pupil in observation, brings him into sympathy with his surroundings, inculcates love of nature, and forms a fine foundation for the instruction in science. The correlation of literature and history with language work, while serving as material for language work, also aids in teaching the child to love the beautiful, the good, and the true, and forms an exceptionally fine preparation for further work along these lines. The study of algebra in the grade schools furnishes also an excellent preparation for more advanced instruction in arithmetic and algebra.

In German the student has mastered the vocabulary, mechanics of reading, and the simpler principles of German Grammar.He is therefore enabled to take up at once literary and scientific reading bearing upon some topic in some branch and

thus aid in its comprehension. There will be ample time, too, for excursions into the fields of German Literature for its own sake, thus enabling the student to appreciate its beauties.

The provision for continuous work for four years in English history and literature empowers the student to derive from these subjects a fair share of their training value. The course in manual training greatly aids in the realization of the physical, intellectual and moral ideals.

The program appears weakest in the science. For reasons stated in a foregoing page physiology ought not to appear on the four years course, neither ought bookkeeping. More time ought to be given to the sciences and another foreign language ought to be introduced. But both were not feasible so I let ideals suffer and aimed at a program that would suit the authorities and the community and at the same time be a step in the right direction. The introduction of electives proved very popular with the students.

Chapter VI.

Functions of the Twentieth Century High School in America.

It is the function of education to fit the child for leading a happy and useful life in the civilization into which he is born. What kind of training will best accomplish this? The history of the past here again becomes the teacher of the present and future. His education must endeavor to secure all that is noble in preceding ideals. Nations and races rise until at the summit of their career their educational ideal is attained. Then comes decay. Their ideals are left to posterity as a legacy to be utilized by new races and new nations in climbing new heights. The resultant of all these efforts and the ideals embodying the imperishable essence of those things that at all times promote human happiness and welfare, beauty, truth, and righteousness constitutes the progress in education. It did not move in a straight line upward. Progress never does; it moves in zigzags. Yet the sum total of this progress, constitutes our superiority over former ages. Our place in the progressive march of civilization is due in large part to the fact that earlier races and nations wrought out their love, hope, aspiration, desire, admiration, and suffering in their priceless legacies--their work of art. In their great epics, lyrics, and drama instinct

Our ideal should be superior.

with human passions and aspirations, in their great treatises on philosophy, religion, government, and science rich in their noble conception of the universe and its government, in their great operas symphonies, songs, fugues, and oratorios causing our very souls to palpitate with their exquisite harmonies and kindling therein joy, patriotic ardor and religious ecstacy, in their enduring monuments, statues, temples, columns, and insight into divineness of beauty and of desires to fathom the mysteries of life. and death, in their world renowned paintings indicating man's widest interests and sympathies, in all these we find embodied the crystallized thoughts and conceptions of the beautiful, the good, the true, the Divine in Nature and Humanity. It is our duty to profit by the experience of former times.

The educational ideal has varied greatly in past ages and will continue to change with the fluctuation of conditions determining the civilization of the race.

In ancient times.

The aim of ancient Persian education was to produce physical strength and moral purity both to be utilized for the welfare of the state. Egypt's aim was to impart to her children the power to earn a livelihood and to inculcate due reverence for ancient customs and authorities. Sparta's efforts were bent toward producing powerful patriotic warriors of dignified manners; Athen s' ideal was a beautiful soul in a beautiful body-to be attained by liberal,

intellectual education and systematic physical exercises. Rome's was a blending of that of the other nations.

In Medieval times.

Throughout the Middle Ages the function of education varied with times and places. At first it consisted in aiding the dissemination of the Gospel, then to render the dogma acceptable to reason. In other places and times, especially among the knighthood, the Athenian aim obtained a strong foothold. So far the aims were quite simple and sharply defined. In consequence they were readily realized. The Revival of Learning brought with it a more complex aim and the increase in its complexity has kept pace with the increasing complexity of civilization.

In recent times.

At the present there is such diversity of opinion as to the aims of education that the endeavor to unify them appears almost a hopeless task. Germany's keynote at present is a religious patriotic citizenship. In our own country it is patriotic citizenship, preparation for business, character training, etc. Our civilization is undergoing such rapid--almost revolutionary changes and is becoming so exceedingly complex that it is no insignificant problem to determine the proper function of secondary education.

What is the ultimate aim?

We can best arrive perhaps at this by endeavoring to forecast a boy's future. Shall we try to ascertain how much he knows? Certainly, because this is one of the elements making for success. Is it the most important element? By

no means. All expert criminals have well trained intellectual powers. It has been said that were they to use the same amount of energy and acumen in pursuits beneficial to society, they would earn as good, if not a better livelihood than they do by following forbidden paths. Is it not evident, then, in view of this, that knowledge and power are not the main consideration? Is the state of his health the vital question? It is another element conducive to success, but not the main one. The main question is Whom does he love? What interests him and have these interests a tendency to raise and elevate him? Only when the answers to these questions are satisfactory, and only then can we look for a bright future. All men whether they know it or not, have an ideal, base or lofty, which molds character and shapes destiny. To have a cultivated mind, to be able to see things of many sides, to have a wide sympathy and the power of generous appreciation, is most desirable, and without something of all this, our life is not only narrow, but our energies are turned in the wrong direction. We do not fit into the civilization into which we were born. The questions of the development of character-of habits of punctuality, good manners and language, of accuracy, cleanliness, neatness, cheerful obedience to duty, consideration and respect for the rights of others, and honor and truthfulness in word and deed are of paramont importance. Joined with a fair amount of knowledge, skill and fair health, they will assist the boy to prominence and at the same time.

secure him that priceless possession--contentment and happiness. These are essentials of complete human development as now understood. Prof, Huxley has well summarized this in the following:

Prof. Huxley's summary.

"That man, I think has had a liberal education who has been so trained in his youth that his body is the ready servant of his will, and does with ease and pleasure all that work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic-engine, with all its parts of equal strength, and in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin gossamers as well as forge the anchors of the mind; whose mind is stored up with a knowledge of the great and fundamental truths of nature, and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience, who has learned to love all beauty, whether of nature or art, to hate all vileness, and to respect others as himself."

The foregoing embodies all that is noble in the educational ideals of past ages.

What of patriotic citizenship?

Some one says "What becomes of patriotic citizenship under such ideals of education?" The principle of patriotism,-benevolence toward our own country, remains. The sentiments of love of country and interest in the people of our nation are natural and when sus-

tained and directed by benevolence constitute the virtue of patriotism-its highest form. The mere sentiment may cause the people to follow the flag in any cause, whether just or unjust. The highest form follows it in a just form only. The former says "My country right or wrong;" the latter, "My country if right, if wrong I will help her to get right." Is not the second the better? Is it not more conducive to promote general human happiness? At a time when telegraphs and telephones, swift express trains and fleet ocean liners eliminate distance and bring the favorable products of other countries to our doors, the advent of international harmony and universal brotherhood ought to be properly promoted by a strict adherence to the principles of right and justice.

Does liberal education unfit for struggle?

Some hold that a liberal education including the cultivation of the aesthetic faculty will unfit men for the rough struggle of life and make them discontented with their lot, and that it is too expensive. This argument is not borne out by experience. The cultivated man has every resource within himself not dependent upon outward conditions. His life is richer and fuller. He finds sermons in stones and the starry decked heavens console him in affliction. He therefore finds relief and refreshment where the uncultivated finds nothing to meet his wants. This has been abundantly proved by trials of endurance as in the Arctic expeditions. Here men of culture survived men possessing

greater physical strength and far more stalwart frames. Women of culture have also proved their great powers of endurance by standing up under the self denial and privations of frontier life, when their more robust but uncultured neighbors succumbed. During the Spanish American war the Rough Riders who had been brought up in the midst of all the refinement of New York's "Fourhundred" endured the hardships of the camp and field in tropical Cuba fully as well and better than their more rugged but uncultured comrades.

Aesthetic Culture expensive? Now one word in regard to the other phase. I concede that aesthetic culture is expensive. But what of it? Does it not increase the productive power of a people in far greater ratio than the expense? It is an undisputed fact that the strength of the world lies in the cultivated nations enjoying the highest standard of living. The rude uncultured nations are needy and dependent even with their diminished wants. The higher the motives, the greater the power. Culture brings self respect. This multiplies and elevates wants. These in turn inspire motives which lead to action tending toward the satisfaction of the wants. In doing this the productive power is increased. Hence the result warrants the expenditure.

Share of Elementary school.

It is clear that the elementary school must lay a firm foundation for this liberal education. Shall it be completed in the high schools or in the universities? It ought to be attained in the high schools. The proper function of the university is to conserve, advance, and disseminate knowledge, and under the guidance of teachers of great excellence and originality to lead students having previously acquired a liberal education into fields of special learning and research by the aid of libraries, publications, laboratories, and museums for the purpose of enhancing human knowledge and welfare. It may take upon itself the task of systematizing the knowledge gained by the education in high schools and give it a professional direction. If this be done it will infringe somewhat upon the special schools but that would be no drawback, because in the special school, the profession ranks first and the systematizing of knowledge, second. In the university this would be reversed thus insuring greater power in the end since experience in actual work does far more toward the mastering of any phase of human activity than can be done through the same amount of energy devoted to theoretical work.

Function of University.

Proper Function of High School.

The function of the high school then in providing this liberal education. It is no place for research nor for any di-

rect professional training. This greatly simplifies the problem, and best serves the interest and consideration of all concerned. It means an excellent preparation for complete living. No time is lost, because an advanced, or a professional training, based upon such foundation can be acquired in a few years. It has been urged that life is too short to spend so much time and money in securing a liberal and then a professional education. Yet both time and money may be freely expended because the time that remains will bring far richer results in increased happiness to the possessor of such training and in higher usefulness to humanity at large. Communities frequently demand in high school courses of study which fit directly for business. I do not see what right any one has to demand that the high school turn out accomplished clerks, bankers, teachers, etc. Neither is such a course desirable. The young in their ardor to earn money frequently press into the field when they would better serve their God, their friends, their country, and themselves by awaiting the drill and discipline required to make their lives effective. Their increased power and superior preparation later on will find more abundant openings for a life of happiness and of service to God and humanity.

Chapter Vll.

Course of Study Required for Securing Liberal Education.

Grades of Schools.

The first point that claims our attention in connection with this subject is the classification of schools and the length of course. At present we have an elementary school of six years, a grammar school course of two years, and a high school course of four years. Is it wise to retain this arrangement? I think not. The present grammar school has served a useful purpose in the past. It formed an extension of the elementary course, a kind of finishing school and induced many scholars to remain in school longer and thus receive a better preparation for the active duties of life. Many of these doubtless would have dropped out at the close of the elementary course had no grammar school existed. Conditions have vastly changed now. Nearly fifty per cent of the pupils in graded schools now finish the grammar school course and this percentage is ever increasing. Parents see the necessity of according their children the time for securing a good education. Yet a very large percentage of those who finish the grammar school course do not enter the high school. If the high school were allowed to absorb the grammar school a far greater percentage of students would finish the high school course. Continuous work along

Ought the Grammar School to be retained?

Results if absorbed by High School.

lines of interest and the associations formed, will be powerful factors in keeping the boys in school until the course is finished. They would receive greater benefit even if they did not remain the full time, because they will have been taught by teachers of wider views and stronger grasps. At the same time this plan will prove a benefit to high schools because it will give fuller scope to teachers in teaching only the subjects in which they are much interested and for whose teaching they have received special training.

Electives. Only a few years ago all students of secondary school, yea, even of colleges passed through a uniform course of study if they wished to graduate. All studied the same subjects in the same proportions without regard to the student's choice or preference. It was a procrustean bed to which all were compelled to conform. Now colleges offer many courses each leading to a degree. High schools also offer from two to seven courses. Since the introduction of electives mean specialization, the questions of its desirability and extent are very important ones. Some educators hold that it is a waste for society and an outrage upon the individual to make a student spend the years when he is most teachable upon a subject whose full training value he cannot reach, when he might have spent them in a subject which would have resulted in achievment for him. They hold

Advantages. that an elective system fosters scholarship because it gives free play to the natural preference and inborn aptitudes and makes possible enthusiasm for the chosen work. I—

Limitations. heartily concur in the foregoing so far as colleges and universities are concerned. In elementary schools of course there ought to be no electives. In high schools electives may be used, but not so freely as in the college. Briefly speaking the function of the elementary school and of the secondary, for that matter, is the harmonious development of the intellectual, moral, and physical powers of the child. Early specialization results in one-sided development and in loss of power to see things in their proper proportion as well as in loss of sympathy with learning as a whole. Furthermore since choice of course often determines a boy's future career it is important that it be made somewhat late in the school course so as to give him an opportunity to make excursions into the principal fields of knowledge for the purpose of discovering his preference and showing his aptitudes. But some electives must be offered in secondary schools because a narrow uniform program without options would not allow the thorough exploration of all the student's abilities.

Requisites of Good Programs. A good program must contain (a) fair representation of the five main divisions of knowledge,- language, history, natural science, mathematics, and art, for the purpose of discovering and systematizing the development of the student's interests and capacities,- intellectual, moral, aesthetic, and constructive; to lead him to gradually emancipate himself from external control and guidance,

to become self-directing, and to come to a realization that he owes a duty to his God, to humanity, and to himself. (b) It must contain provision for guarding and promoting his normal physical development. (c) Each year should be as complete as possible since many students leave annually. (d) Each subject ought to receive enough time to give a fair share of its training value.

Suggestive Program.

Since high school instruction is based upon that received in the elementary school it becomes necessary for me to outline the elementary before giving the secondary course.

Elementary School.

Kindergarten.

Age 5-6 15 hours a week.

Conversation, Story telling.

Singing Games.

First Grade.

6-7 17 hours.

Reading.

1. Instruction by the sentence, word and phonic methods. Use objects, pictures and blackboard. Follow with charts and finally use the First Reader.

2. Supplementary reading; long and short sounds of a and e. Use every natural device as colored crayons, objects, questions, etc., to awaken interest. Secure good articulation and expression.

English.

(a) 1. Conversation suggested by objects and pictures in reading, nature study, drawing, etc.

2. Reproduction of historical and other stories, myths, and fairy tales. Cinderella, Mrs. Wiggins' Story Hour, Scudder's Fables.

3. Description of facts observed; memory gems.

4. Correct use of is and are, a and an.

(b) Stories about the boyhood of great men as Columbus, Franklin, Washington, Lincoln.

(c) Geography. Study sand, clay, fruits.

2. Place-Use objects to teach the terms right, left, above, below, etc.

3. Direction-Exercises in direction, beyond, toward, etc. Cardinal Points.

Writing and Drawing.

1. Copying from blackboard; proper position of body and hand.

2. Clay modeling. Cube and sphere.

3. Paper folding and cutting.

4. Free hand drawing.

Singing and Games.

1. Appropriate songs, learned by rote; the scale learned; motion songs.
2. Games.

Second Grade.

7-8 18 hours.

Reading.

(a) 1. Finish First Reader; Second Reader begun.

2. Supplementary reading; long and short sounds of all vowels; training in articulation, inflection and expression. Endeavor to make the reading as much like good conversation as possible. Get the thought.

(b) 1. Complete mastery of all words in regular readers and texts; work to be oral and written.

2. Keep list of words frequently misspelled and mispronounced and give drills from the list.

English.

(a) 1. Review of First Grade work.

2. Conversation, description and dictation.

3. Hiawatha's Childhood. Short memory gems.

4. Nature study and history. See outline.

5. Reproduction of stories and myths. Hawthorne's Wonder Book.

6. Correct use of was and were, this and that, these and those; of forms of freeze, tear, write, go.

7. Terminal marks.

(v) 1. Review First Grade work.

2. Weather-Rain, snow, ice, clouds, sun. Form and use.

3. Plants-Wheat, oats, coffee, rice. Growth and use. Plant a few seeds in the school room and have pupils observe.

4. Animals-Cat, dog, horse, cow, squirrel, mouse.
Form, food, use, covering, dwelling, adaptation of body to life, stories about their habits.

5. Diagram of school room, house and grounds with points of compass.

6. Seven Little Sisters. Read to class.

(c) 1. Time by the clock.

2. Parts of the body; five senses.

Number Work.

(a) 1. Exercises in numbers; notation and numeration to 100.

2. Easy fundamental operations in sums, minuends, products, and dividends not to exceed 20, and the multipliers, subtrahends and addenda up to 4 or 5.

(b) 1. Notation and numeration to 1000; tables of twos, threes and fours.

2. Fundamental operations. Easy problems.

Writing and Drawing.

(a) Blackboard work; copying from book; use pencil and paper; secure legibility.

(b) Free hand drawing.

2. Clay modeling; paper cutting and folding; form study.

3. Free expression in stories illustrated.

Singing and Games.

1. Review First Grade work; new songs, staff.

2. Intervals of the scales. Music chart.

3. Games.

Third Grade.

8-9 18 hours.

Reading.

Reader; supplementary work; Spelling; meaning of words by definitions, synonyms or use in sentences.

English.

(a) 1. Review work of Second Grade. Outline for history and nature study.

2. The Village Blacksmith; short memory gems.

3. Conversation, description, narration, and dictation.

4. Stories reproduced. Seven Little Sisters Prove their Sister-

hood.

5. Terminal marks; common abbreviations; common irregular verbs; correct use of forms of personal pronouns.

(b) 1. Review Second Grade work; bear, lion, fish, robin, insects; corn, potatoes, articles of clothing; occupation of people.

2. Locate on map places mentioned in stories; geographical forms taught by means of sandboard.

3. Primary Geography. Read in class.

4. Read Each and All.

(c) 1. Fifty Famous Stories-Baldwin.

2. Observation of plants as the seasons change.

Arithmetic.

1. Notation and numeration to 10,000; tables to the tens, four fundamental operations.

2. The Federal money; Problems.

Writing and Drawing.

(a) Movement exercises; combinations; Pen and ink.

2. Practice Blank; Copy Book.

(b) Free hand and mechanical drawing.

2. Illustrating poems and stories. Free espression.

3. Free expression. In Geography.

4. Form study, paper folding and cutting, color.

Singing and Games.

1. Review Second Grade work; new songs, study of intervals continued. Music Reader.
2. Games.

Fourth Grade.

9-10 20 hours.

English-Reading, writing, spelling, language.

History (1 hour)
Arithmetic 1- 1/2)
Drawing (1)
German (3)

Geography (1-1/2 hours)
Nature Work (1)
Music and Games (2)

French may be substituted for German.

Fifth Grade.

10-11 20 hours.

English
History (1-1/2)
Arithmetic (2)
Drawing (1)

German (3-1/2)
Geography (1-1/2)
Nature Work (1)
Music and Physical Exercises. (2)

Sixth Grade.

11-12 20 hours.

English

History (1-1/2)

Arithmetic and Inventional Geometry (2)

Physiology (1)

Drawing (1)

German (3-1/2)

Geography (1)

Nature Work (1)

Music and Physical Exercises (2)

High School.

First Year.

Required:

12-13

English

History (1-1/2)

Arithmetic & Geometry (2)

Drawing (1)

Latin (3)

20 hours.

German (3)

Geography (1)

Botany (1)

Music and Physical Exercises (2)

Second Year.

13-14

English

Latin (3)

Geography (1)

20 hours.

German (1-1/2)

History (1)

Arithmetic, Algebra and Bookkeeping (3)

Geology (1)
Music and Physical Exercises (1-1/2)

Drawing (1)
Manual Training (1-1/2)

Third Year.

English (3)
German (1)
Mathematics (2)

History (1-1/2)
Botany (1)
Electives sufficient to fill time.

Fourth Year.

English (3)
Physics (2)
Music and Drawing (1-1/2)

History (1)
German (1)
Electives.

Fifth Year.

English (3)
Chemistry (2)
Civics (1)

History of Literature (1)
Music and Drawing (1-1/2)
Electives.

Sixth Year.

English (3)
Music and Drawing (2)

Reviews of Common Branches (5)
Electives.

Electives.

Electives will embody two years courses of from two to five hours per week in Greek, Spanish, German, French, Latin, Mathematics, including Trigonometry, Literature, History, Economics, Natural Science, Biology, Psychology and Ethics, Manual Training, and Domestic Economy, Oratory, Games and Athletics.

Remarks on the foregoing.

The foregoing is to a certain extent ideal, yet it presents no impossibilities. When the problem of transportation of children in rural districts has once been solved, the high schools will have an attendance sufficiently large to warrant them in securing a sufficient number of capable teachers to offer the foregoing courses. The courses may be called classical, literary, scientific, or commercial, depending upon the electives pursued. This however is a matter of no great importance.

The work outlined may seem heavy, but upon close examination it will not prove so. If the course has been properly followed, the child on leaving the third grade, will have the power to read ordinary language, write legibly, and handle with facility and accuracy the fundamental operations in arithmetic. The course in literature and history in connection with the language work in other subjects will enable him to express his thoughts in simple yet clear language. His nature work and drawing will have trained his observational powers, aroused

interest in, and love for nature. As a result of the instruction in music, games, and physical exercises he will have formed correct physical habits, in breathing, sitting, standing, and walking. These acquisitions will prove a great help at all future times and in all future work.

Questions may be asked as to the purpose of introducing so many subjects in the grades at so early a period. Is it not better to broaden the views of the child by introducing him to new realms, within his comprehension, to open up new vistas looking into pleasant fields of learning, than to nauseate him with the minutiae of primary studies? It is true, beyond doubt, that a mistaken notion of thoroughness on the part of teachers is to blame for the indifference of many children for further efforts when they reach secondary schools. Partly for this reason the review of common schools'branches has been placed in the last high school year. The other reason is that the last year is the proper time for reviews. It will prove more profitable. They have used those branches in studying other subjects and have seen their relation to other branches. In the light of algebra and geometry, the review of arithmetic becomes pleasant.and profitable work.

English receives more attention than any other subject and rightly so. In practical importance no subject is the peer of the English language. To give the child the power to expres-

his thoughts with ease, and grace by tongue or pen, as did the Greeks of yore, is one of the greatest benefits that any school can bestow upon its students.

The study of literature and history receives so much attention because it means the training of the circle of thought by means of the interest so as to render it capable of volition. This is one of the chief means for supplementing environment and experience for counteracting wrong habits already formed and wrong influences thrown around the child by metamorphosing the sentiments implanting just ideas of right and wrong, of virtues and vices, by developing a system of ethical maxims in the child. With such a circle of thought as the supreme law giver the child's inclinations, will, and actions will be rightly guided everywhere and at all times.

Present right ideals to the child and why should it not produce the desired results? From Herbart's psychology we plainly perceive that all wishes, desires, resolutions, and actions proceed from the circle of thoughts since they were thoughts once and their energy is wholly dependent upon the aid or repulsion they receive while in consciousness. So if we secure to the child the right kind of concept mass-which can be done through presentations-the desired results must follow. The richest material for this purpose is naturally found in matters pertaining to the human race, in history and literature. These fields are well adapted for this work in as much as the histor-

ical growth and development of mankind furnishes the necessary gradations of institutions corresponding to the ability and the natural development of the child. Human life is therein portrayed in it's typical forms and vivid personifications abound upon which to nourish the moral spirit of the child. It presents many noble and beautiful acts, also ignoble ones, and love for the right an aversion for the wrong is easily created among children when the right illustrations are presented. To overcome bad habits and influences, examples and inspirations tending in an opposite direction must be provided and this also is done by selecting companions for the child from the best persons of history and literature. Furthermore, since heredity places us at an advantage or at a disadvantage by giving us ready-made impulses, and since aesthetic qualities are the most likely to be transmitted by heredity, it is of great importance for the good of the race that choice literature nourish the minds in each generation.

Furthermore the study of literature and history will result in clearer thought and finer feeling, in addition to making for stronger impulses for making choices and perform deeds, for purity of heart, fulness of sympathy, and rectitude of life.

German and French are studied not alone on account of the usefulness of these languages to tourists, commercial travelers, etc., but also on account of the magnitude and worth of their literature. The power to read readily both of these languages,

is an absolute necessity to the physician, physicist, naturalist, chemist, etc. All agree that a knowledge of these is indispensable to the intelligent pursuit of any subject beyond its elements. A knowledge of one or both of these languages or one of them and Latin, will also enable the student to know and appreciate the finer distinctions in our language and will in this way increase his power of expression in thoughts.

Instruction in natural science will get the child to love and appreciate nature and her beauty and bring about an insight into nature and into the inventions and contrivances which men use in utilizing her forces and laws. Instruction can always be made aesthetic in the beautiful fields of natural science and since aesthetic instruction in a manner goes hand in hand with moral instruction, this field has a stronger claim for consideration than it would have were it not for the fine opportunities it affords for developing the aesthetic side of the child. Let him study and learn all that can excite admiration, and rest assured that this will aid in the formation of a desirable character.

In conclusion I will say that a course like the foregoing or a similar one based upon the principles laid down, will be powerful a factor in producing men and women closely approximating Professor Huxley's ideal. May the time come soon when such courses may be at the disposal of every child in our noble land. There will be more sunshine in the heart of every one.

This will go a long way toward producing "Peace on earth, good will toward men."

Bibliography.

Arnold, M. ---------- A French Eaton

" " ---------------German Secondary Schools.

Barnard, Henry---------- National Education.

Bolton, F. S. --------- Secondary School System of Germany.

Butler, Nicholos M. --- The Meaning of Education.

Wilke. Problems of Great Brittain

Eliot, Chas.------------ Educational Reform.

Guimps, De Roger------ Pestalozzi.

Hanus, Educational Aims and Values

Laurie, S. S. ---------- The rise and constitution of universities

Martin, G. H.----------- Massachusetts public school system.

Paulson, F. ---------- German universities.

Painter, F. B. ------- History of Education.

Paul, ---------------- Plutarch:his lives and his morals.

Russell, -------------- German schools.

Schmidt,.K..A.-------- History of Education.

Seeley,L.--------------- The common school system of Germany and its lesson to America.

Wickersham, J. P. ----- History of education in Pennsylvania.

Reports of Commissioner of Education.

Wisconsin Journal of Education.

Report of Committee of Fifteen.

Report of Committee of Seven.

Report of Committee of Ten.

Report of Committee on Entrance Examination.

Reports of the National Educational Assn.

Articles from the Forum, Educational Reviews, etc.

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